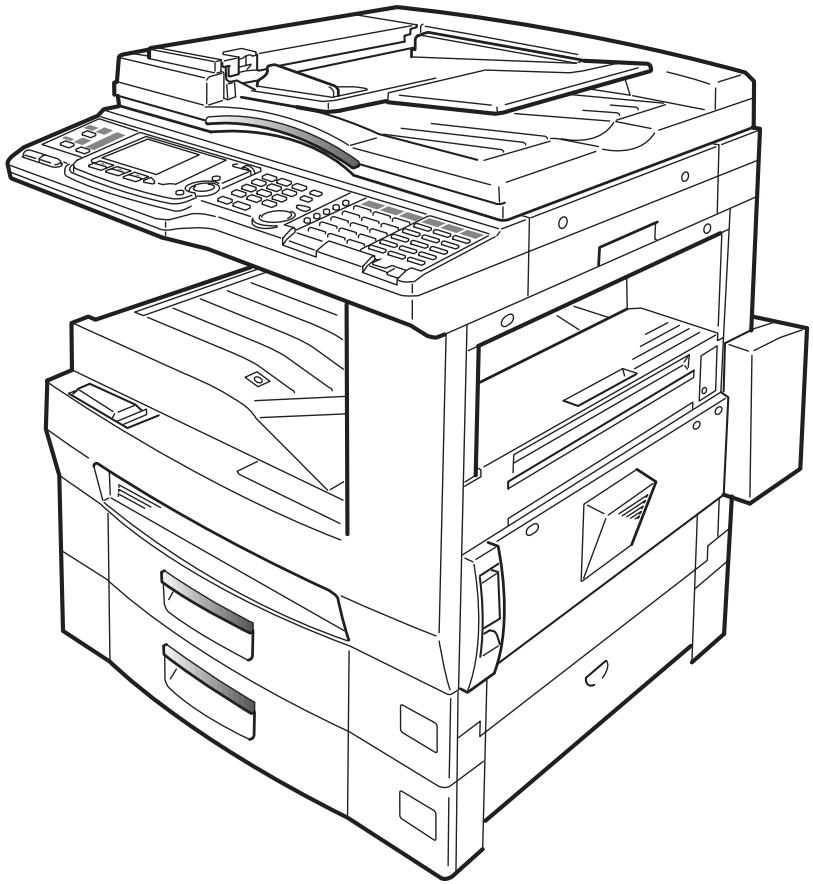
Muratec MFX-2500
Operating Instructions



Fax Reference

muratec
the fax specialists

Trademarks

Muratec, the Muratec logo and all Muratec fax product names contained herein are trademarks of Murata machinery, Ltd. and Muratec UK, Ltd.
ENERGY STAR is a registered mark of the United States Environmental Protection Agency.

Copyright

Copyright © 2000 by Murata/Muratec; all rights reserved.

As an Energy Star® partner, Muratec has determined that this product meets the Energy Star guidelines for energy efficiency.

Super G3 is an extension of Group 3 fax technology standards, allowing the use of high-speed ITU-T V.34 bis modems for 33.6 Kbps transmission and high-speed protocols for rapid handshaking.

JBIG — Joint Bi-level Image experts Group, the new ITU-T standard image data compression method. As JBIG compresses the data more efficiently than MMR, it is especially effective when transmitting halftone (grayscale) image document.

CE Statement

The MFX-2500 carries the CE mark.

This indicates that the machine complies to EN55022 1998 (Class B), EN55024 1998, EN61000-3-2 1995 +A1 +A2, and EN61000-3-3 1995 in accordance with EEC directive 89/336/EEC.
In addition the machine has been safety tested to IEC60950 1991 +A1 +A2 +A3 +A4 in accordance with EEC directive 73/23/EEC.

The MFX-2500 is a Class 1 LASER product conforming to IEC60825-1 1993 +A1.

This equipment is suitable for connection to analog PSTN telephone networks that conform to the signaling requirements of CTR21. In case of a problem for further information please contact your supplier.

Introduction

Thank you for choosing the Muratec MFX-2500.

The Muratec MFX-2500 is a multi-function machine, combining facsimile and copier features.

The operating instructions for this machine are divided into three books. Please read the instructions you carefully.

- **"General reference"** — Describes the basic operations and basic caring of your machine. Covers what you *have* to know to use your machine immediately.
- **"Fax reference"**(This book) — Describes the various faxing features.
- **"Copy reference"** — Describes the various copying features.

Symbol and terms (Operating tips)

In this manual, the following symbols and terms are used, make sure you know what they mean.

⚠ ***CAUTION***	This symbol indicates how to avoid personal injury.
Important:	This instruction describes conditions or incorrect operations that could cause damage to your machine.
Note:	A note describes helpful hints, restrictions, or how to avoid difficulties.
[ ]	Keys that appear at the lower parts on the LCD. To press this key, use the item select key.
" "	Items that appear on the LCD.
BOLD WORDS	Keys built into the machine's control panel.
LCD	The Liquid Crystal Display. It shows the machine's status, error messages and function menu, etc.
Document	A document is the original sheet(s) of paper you send or copy on your machine.
Paper	A paper is the recording paper for printing.
,	It means that the direction of the document or paper. See also "About and symbol," on next page.
Menu	Any function can be started by first pressing **MENU** key.
Cursor key	Press ▲, ▼, ◄ or► to select items in a menu or move the cursor.

<Operating tips>

Here's an example. If we say "press **MENU, J, 0, 7, [Enter]**" ...

... you'd press	**MENU**
... then	**J**
... then	**0** (the numeric key *zero)*
... then	**7**
... and then	Item select key correspond to **[Enter]**.

Note: Even though our example above includes commas, do not enter them into the machine. Those characters appear in our instructions to separate one number from the other. They do not need to be entered into your machine. There is a function (broadcasting) which requires commas to be entered, but there is a special way to enter them. We'll explain this process later.

What's a fax document?

A *fax document* is anything a fax user wants to fax to someone else. It can be one or more pages, and it can be text, a drawing or even a copy of a photograph.

What's a fax number?

Because your fax operates on standard phone lines, a *fax number* is just a regular phone number. And because your fax is also a high-quality, full-featured telephone, your fax number can be your regular phone number.

What are resolution and grayscale?

Just as cars are measured by engine size, fax machines are measured by *resolution* and *grayscale*.

There are at least three levels of resolution for most fax machines:

- *Normal* (8 dots/mm (horizontal) × 3.85 lines/mm (vertical))
- *Fine* (8 dots/mm (horizontal) × 7.7 lines/mm (vertical))
- *Superfine* (16 dots/mm (horizontal) × 15.4 lines/mm (vertical)).

Grayscale levels, or shades of gray — refers to the many shades of gray your fax machine sees on a document it's sending. It's likely most of your fax documents will be dark text on white paper. However, when you want to send photographs and other shaded items, you can set your fax machine to transmit in 256-level grayscale.

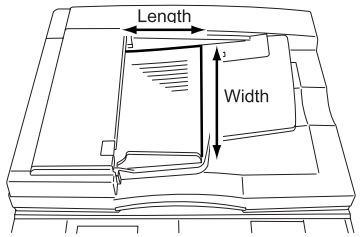
Why not always set your fax machine for superfine, or for grayscale?

Setting your fax machine for superfine resolution and grayscale mode makes your machine send more information, making transmissions last longer and potentially driving up your phone bills on long-distance calls. You'll find that we've made it easy for you to set your fax machine for the most efficient and truest transmission for the types of documents you send.

About and symbol

and symbol indicates the direction of your document or recording paper.

When the document or paper has a width longer than its length, we use symbol .



When the document or paper has a width shorter than its length, we use symbol .

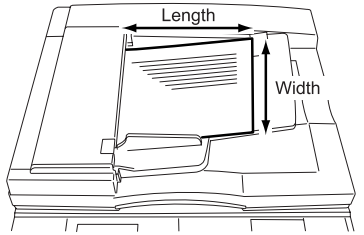


Table of contents

Introduction

Symbol and terms (Operating tips) i
About ▯ and ▯ symbol ii

Getting started

Control panel 1.1
Panel display (Liquid Crystal Display) 1.3
Fax standby display 1.3
Communication options menu display 1.4
Fax setting menu display 1.4
Machine setting menu display 1.4
Some guidelines 1.5
Acceptable document size 1.5
Things not to put in your fax 1.5
How to set the document 1.5
Auto document size detection 1.5
Resolution, grayscale and contrast 1.6
Entering a pause character when dialing 1.6
TTI select 1.7
Select scanning size to be sent 1.7
Sending a fax 1.8
Using memory transmission 1.8
Sending a fax from the ADF 1.8
Sending a fax from the FBS glass 1.9
Sending a fax using monitor/call or a handset 1.10
Redialing 1.11
Review Commands, an introduction 1.11
Receiving faxes 1.12
Reception modes 1.12
Tel Ready mode 1.12
Fax Ready mode 1.12
Fax/Tel Ready mode 1.13
Tel/Fax Ready mode 1.13
Ans/Fax Ready mode 1.13
If the paper runs out 1.13

Beyond the basics

Autodialer 2.1
Autodialer basics 2.1
Using one-touch numbers 2.2
Using speed-dial numbers 2.4
Using call group 2.7
EasyDial directory dialing 2.8
Broadcasting 2.9
Broadcasting basics 2.9
Delayed broadcasting 2.9
Making changes to broadcasts 2.9
Delayed transmission 2.10
Setting up a delayed transmission 2.10
Reviewing or cancelling delayed commands 2.11
Printing a delayed command list 2.11
Printing a stored document 2.11
Batch transmission 2.12
Creating or modifying a batch box 2.12
Printing a list of batch boxes 2.13
Erasing an empty batch box 2.13
Storing a document for batch transmission 2.13
Printing a document stored in a batch box 2.14
Erasing a document stored in a batch box 2.14
Special features 2.15
Soft Keys 2.15
Macros 2.16
Programming the Macro key 2.16
Erasing a Macro key 2.17
Printing a list of your Macro keys 2.17
Setting the speed for Macros 2.17
Fax dialing with the Macro key 2.18
Setting the activity journal 2.18
Setting the reports: TCRs and RCRs 2.19
Enlarge transmission 2.20
Fax & Copy 2.20
Cover page 2.21
Numbering pages 2.21
Polling 2.22
Transferring documents (Fax Forwarding) 2.23

Audible alarm 2.25
Call request 2.25
The power of multi access 2.26
F-Code communication 2.27
F-Code: an introduction 2.27
Creating or modifying an F-Code box 2.27
Printing a list of F-Code boxes 2.32
Printing a list of documents stored in your F-Code boxes 2.32
Using a security box 2.32
Using a bulletin box 2.33
Using a relay box 2.34
Erasing an empty F-Code box 2.34
F-Code transmission and polling 2.35
Programmable one-touch keys 2.37
Using the power of programmable one-touch keys 2.37
Programming a delayed transmission 2.37
Programming a broadcast / group 2.38
Programming regular polling 2.39
Programming a batch transmission 2.40
Programming an F-Code transmission 2.40
Programming F-Code polling 2.41
Erasing a programmable one-touch key 2.42
Printing a list of your programmable one-touch keys 2.42
Fax dialing with programmable one-touch 2.43
Security features 2.44
The passcode 2.44
Security reception 2.44
Masking the PIN 2.45
Setting security transmission 2.47
Setting for use with a closed network 2.48
Setting Block Junk Fax 2.48
Using department codes 2.49

Entering settings for your machine

Settings for transmission 3.1
Scan settings 3.1
Setting ECM 3.1
Memory transmission 3.2
Quick Memory transmission 3.2
Image rotate transmission 3.3
Setting the confirmation stamp 3.3
Settings for reception 3.4
Print settings 3.4
Setting the number of rings 3.5
Setting ECM 3.5
Settings for dialing 3.6
Changing the dialing pause length 3.6
Changing redial settings 3.6
Settings for operation 3.7
Setting of the silent mode 3.7
Adjust the monitor speaker's volume 3.8
Panel auto reset time 3.9
Printing your fax settings 3.9
Printing a program list 3.9

Trouble Shooting

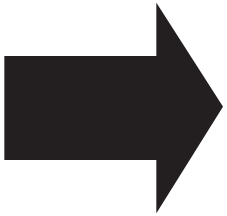
Troubleshooting 4.1
Alarm 4.1
LCD error messages 4.1
Errors 4.4
Common questions 4.6
General questions 4.6
Sending faxes 4.6
We're here to help you! 4.6
Reports 4.7
Receiving faxes 4.8
Working with your answering machine 4.8
Polling 4.8
How your fax machine works 4.8

Appendix and index

Glossary AI.1
Index AI.5

This page intentionally blank.

Getting started



ControlControl panel 1.1

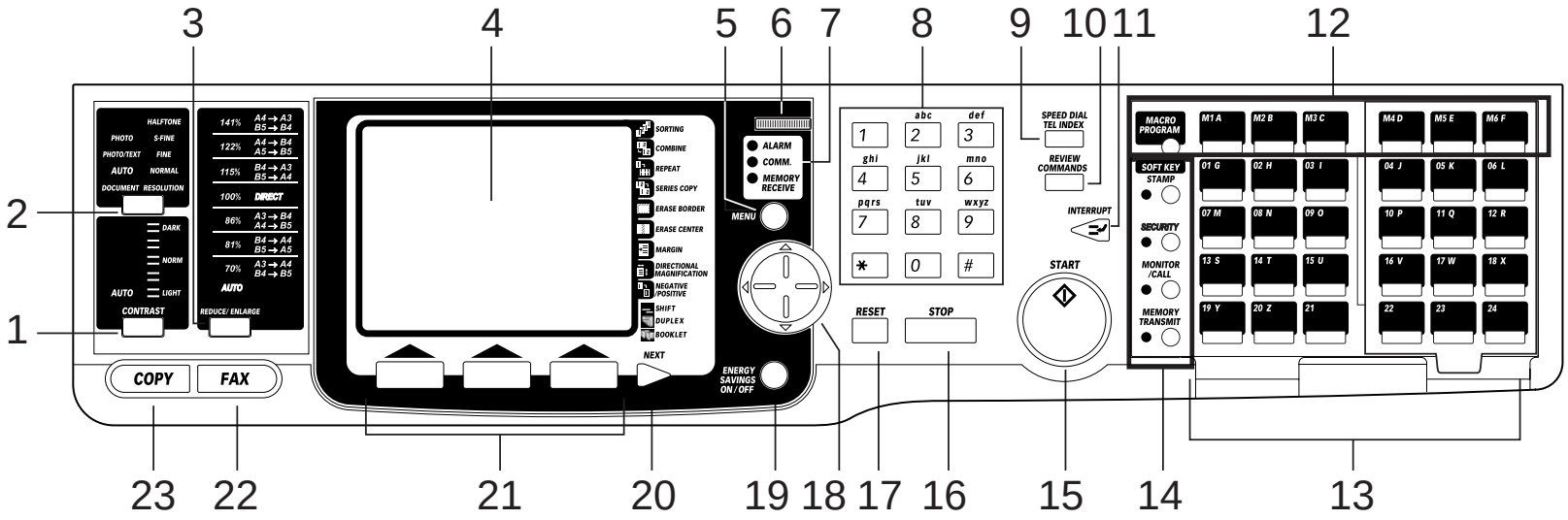
Panel display (Liquid Crystal Display) 1.3

Some guidelines 1.5

Sending a fax 1.8

Receiving faxes 1.12

Control panel



1 **CONTRAST** — Press to adjust the contrast level.

2 **RESOLUTION** — Press to toggle among the three resolution modes and 256-level grayscale.

3 **REDUCE/ENLARGE** — Press to choose one of several preset enlargement ratios for enlarge transmission. (In fax mode, the reduction ratios are not used.)

4 **Liquid crystal display (LCD)** — Shows the machine's status and lets you see what you're programming into the machine.

5 **MENU** — Press to access the advanced functions menu.

6 **LCD contrast volume** — Use to adjust the contrast of the LCD.

7 **Status lights**

ALARM light — Glows when a problem occurs during fax communication, printing or scanning.

COMMUNICATION light — Glows when the machine is communicating with another fax machine.

MEMORY RECEIVE light — Glows when the machine is receiving an incoming fax document into its electronic memory.

8 **Numeric keypad** — Just like the numeric keys on a regular tone-dialling phone. Use these to dial phone and fax numbers and to enter numbers when you're setting up the machine.

9 **SPEED DIAL/TEL INDEX** — Starts a *speed-dialling* operation, which you finish by pushing three of the keys on the *numeric keypad*. Also displays *one-touch* and speed-dial entries sorted alphanumerically, as in a telephone directory.

10 **REVIEW COMMANDS** — Press to review pending fax commands or to view a brief description of delayed commands.

11 **INTERRUPT** — Press to interrupt the current printing job and make copies.

12 **Macro Keys** — Programming the Macro keys (M1 – M6) can reduce many steps of the operation to a simple press of a key. You can "teach" the Macro keys to carry out one of the several operations.

13 **One-Touch Keys** — The keys labeled **01–78** offer one-touch dialling convenience. You also can use the keys labeled **79–84** for programmable functions: this lets you teach your machine an advanced multi-step function just once, then recall the function at any time by pressing one of these keys.

14 **Soft keys** — Shortcut keys. Any function that can be turned on or off can be programmed into these four keys. If the light above one of these keys glows, this indicates the setting that's been programmed into it (see page 2.15) is turned on. These keys are programmed at the factory to turn the following functions on or off:

Soft key 1: **STAMP** — Press this key to set the machine to *stamp* each original document or page automatically when the machine scans it successfully.

Soft key 2: **SECURITY** — Press to turn the security reception on or off.

Soft key 3: **MONITOR/CALL** — Turns the *monitor speaker* off or on. When it's on, it allows you to hear the call you're making. When using this feature, you can only hear the communication taking place. You cannot be heard unless you use a handset (optional). When sending a fax, this key also activates the *call request* feature.

Soft key 4: **MEMORY TRANSMISSION** — Selects which transmission mode your fax machine uses, whether from memory or from the document feeder.

15 **START** — Press to begin a fax transmission or reception.

16 **STOP** — An all-purpose "Whoa!" key. Stops the current operation and ejects a document from the document feeder.

17 **RESET** — Press to cancel the settings.

18 **Cursor key** — Use in various scenes, to select an item on LCD or to enter the numbers when you are setting up the machine.

19 **ENERGY SAVING** — Press to enter the sleep mode. If you press it for 3 seconds, it will be in the auto power off mode. Press this key again return to standby mode.

20 **NEXT** — When the frame of the item at the lower part on LCD is shown with double or more lines, it means that you can select more items. Press this key to show the more items.

21 **Select function keys** — These keys correspond to the items at the lower part on the LCD. Press to choose item at the lower part on the LCD.

22 **FAX** — Press to change from Copy mode to Fax mode.

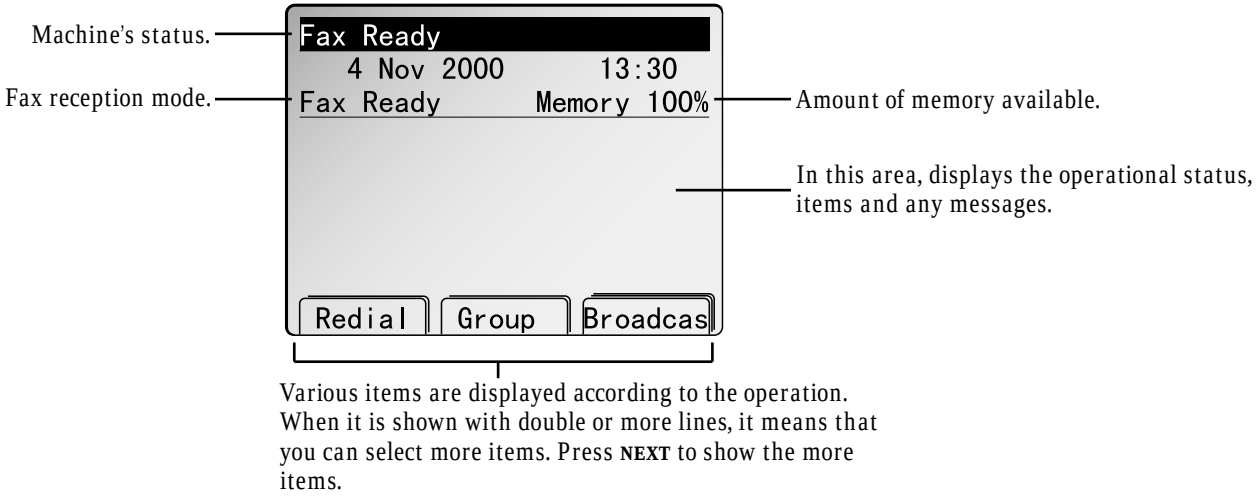
23 **COPY** — Press to change from Fax mode to Copy mode.

Panel display (Liquid Crystal Display)

Fax standby display

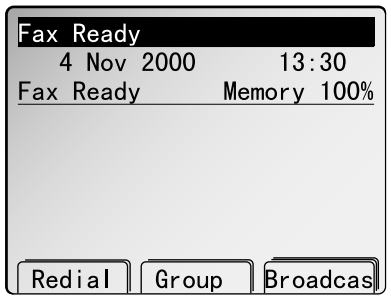
The LCD shows the machine's status and messages you through operation.

Note: Make sure the machine is in the fax mode. If the machine is not in the fax mode, press **FAX** change to the fax mode.


Machine's status.
Fax reception mode.
Fax Ready
4 Nov 2000 13:30
Fax Ready Memory 100%
Redial
Group
Broadcas
Amount of memory available.
In this area, displays the operational status, items and any messages.
Various items are displayed according to the operation. When it is shown with double or more lines, it means that you can select more items. Press NEXT to show the more items.

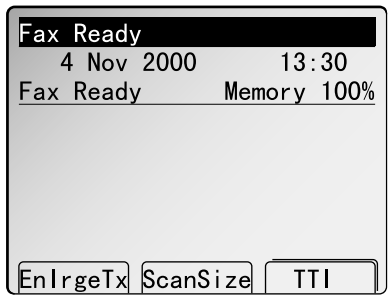
Select function keys.

You can select the following function in the fax standby mode. Also, these key indications will be changed according the function you are using.



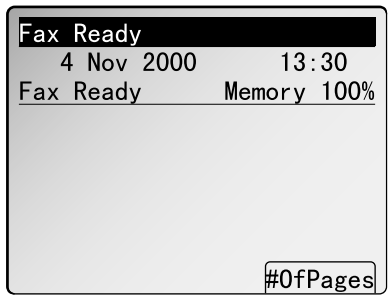
NEXT

Press **NEXT.**



NEXT

Press **NEXT.**



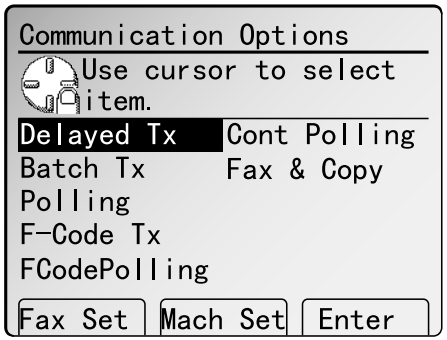
- Redial – See page 1.11.
- Group – See page 2.7.
- Broadcast – See page 2.9.

- Enlarge Tx – See page 2.20.
- Scan Size – See page 1.7.
- TTI – See page 1.7.

- # of Pages – See page 2.21.

Communication options menu display

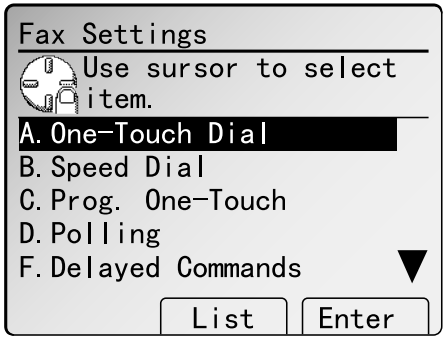
To access the communication options menu, press **MENU**.



(In "Beyond the basics," beginning on page 2.1, we'll explain these functions)

Fax setting menu display

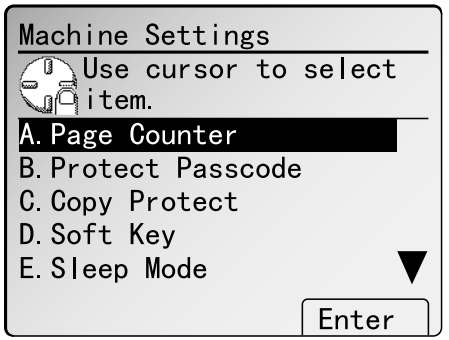
To access the fax setting menu, press **MENU**, **[Fax Set]**.



(In "Beyond the basics," beginning on page 2.1, we'll explain these functions)

Machine setting menu display

To access the machine setting menu, press **MENU**, **[Mach Set]**.



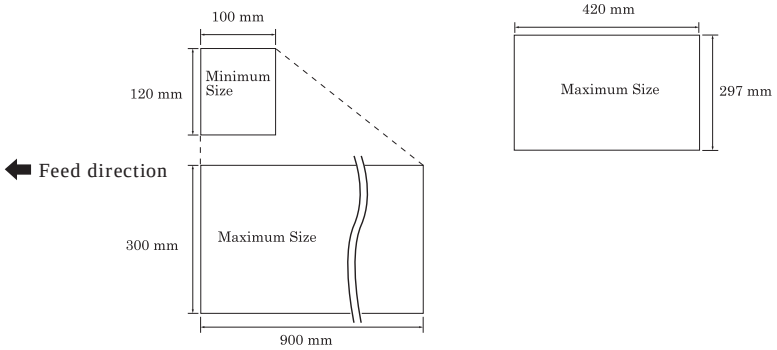
(See "General reference" for details.)

Some guidelines

Acceptable document size

The acceptable dimensions as follows:

•In the Automatic Document Feeder(ADF) •On the Flatbed Scanner(FBS) glass



Automatic document feeder (ADF) (width × length)

	SINGLE-SHEET	MULTIPLE-SHEET
Maximum:	300 mm × 900 mm	297 mm × 420 mm
Minimum:	120 mm × 100 mm	148 mm × 105 mm
Weight:	30.2 – 104.7 g/m²	52.3 – 104.7 g/m²

You can set up to about 50 sheets of A4-, 40 sheets of B4- or 30 sheets of A3-sized document in the ADF at a time.

Flatbed scanner (FBS) glass (width × length)

Maximum: 297 mm × 420 mm

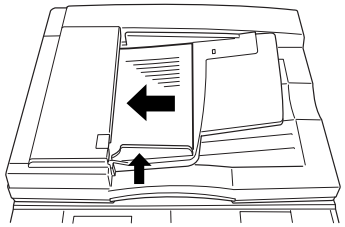
Things ***not*** to put in your fax

To avoid paper jams and damage to your machine, ***don't*** **insert:**

- Folded, curled, torn, wrinkled or very thin pages
- Documents with staples, glue, tape, paper clips or still-wet correction fluid
- "Sticky notes" (or documents with "sticky notes" attached)
- Cardboard, newspaper or fabric
- Pages with duplicating carbon on either side
- Credit cards or any small, thick items

How to set the document

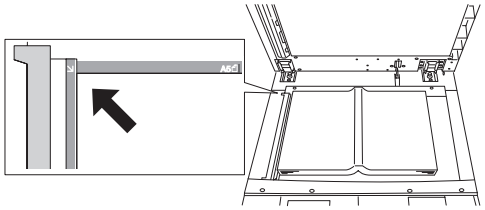
When setting the documents in the Automatic Document Feeder



1. Align your document to the *rear left corner*.
2. Adjust the document guide to fit your documents.
3. Set your document **face up** into the document feeder.

Note: You cannot set the different sized document at a time.

When setting the documents on the FBS glass



1. Lift the platen cover fully.
2. Set your document **face down** on the FBS glass. The document should be aligned to the *rear left corner*.
3. Gently close the platen cover.

Note: If you do not lift the platen cover fully before close it, the document size will not be detected automatically.

Auto document size detection

The following sized documents are automatically detected.

- A3
- B4
- A4
- B5
- A5

Resolution, grayscale and contrast

Reviewing resolution and grayscale:

- ***Normal*** *resolution* is suitable for most typed documents and simple drawings.
- ***Fine*** *resolution* is ideal for maps, moderately complicated drawings, floorplans or handwritten documents.
- ***Superfine*** *resolution* ("S-FINE" on the control panel) reproduces the detail of extremely complicated drawings or line art.
- ***Grayscale*** *mode* ("HALFTONE" on the control panel; "Gray" on the LCD) captures shades in photos and drawings.

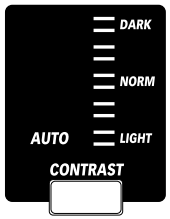
Note: If you send a fax in superfine, certain fax models (especially older, non-Muratec models) receive it only in fine mode. However, you can send a fax in grayscale mode to virtually *any* fax machine currently in use.

To change the resolution setting, press **RESOLUTION** repeatedly. A glowing LED indicates the machine is using the setting named by that LED.

Reviewing contrast:

Setting the contrast allows you to compensate for any excessive lightness or darkness, as the case may be, of document pages you are sending or copying.

Pressing **CONTRAST** to select the contrast mode:



DARK – Darkens weak, "washed-out" images.
= – Provides some darkening of documents.
NORMAL – Suited to most documents.
= – Provides some lightening of documents.
LIGHT – Lightens up overly dark documents.
AUTO – This mode automatically set the suitable setting according to the document density.

Note: You can set the primary mode of the resolution and contrast.
⇒ See Page 3.1.

Mixing resolution and contrast in a multiple page

When you send the document with more than one page, you can select different resolutions and contrasts for each page.

Place your document, select resolution and contrast for first page, dial and press **START**. Then follow one of the following two procedures.

When the document is placed in the ADF

Select resolution and contrast before the next page is scanned.

When the document is placed on the FBS glass

1 Remove the previous page and place the next page.

2 Select resolution and contrast. Then press **START**.

Entering a pause character when dialling

Some long-distance systems require dialling pauses, and pauses can also be useful when you're dialling through special telephone exchanges.

When you are dialling or storing the autodialer, and you want to insert a *pause* character, press **NEXT** until the **[Pause]** is appeared on lower part of the LCD, then press **[Pause]** *after* you've dialled at least one other character. **-/** (the pause character) will appear on the LCD.

Each pause entered lasts for a factory-set two seconds.

For example, if the pause is at the factory setting, pressing **9, NEXT, [Pause], 19725552009** dials *9 [2-second pause] 1 9 7 2 5 5 5 2 0 0 9.*

Note: Each pause uses *two* of the characters you're allowed in a number.

Note: To change the dialling pause length, see "Changing the pause length," page 3.6).

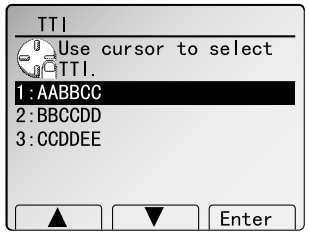
TTI select

When you send a fax message, your TTI is automatically printed at the top of documents you send. You can select one of three TTI you've stored in your machine.

Note: See "EasyStart" on the *General reference*, to refer the storing the TTI.

To select the TTI:

1. Place the document and select resolution and contrast you require.
2. Press **NEXT** until **[TTI]** is appeared on the LCD.
3. Press **[TTI]**.
4. Using a cursor key to select TTI you want to send.
5. Press **[Enter]**.
6. Dial a fax number.
7. Press **START**.



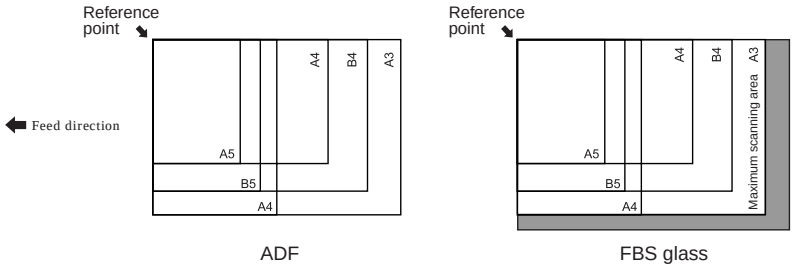
Note: After transmission if you did not select TTI before sending a document, the stored TTI you've selected in EasyStart will be printed at the top of document you send.

Select scanning size to be sent

When you send or store your document, usually the machine automatically detects the size of your document when it is placed on the ADF or FBS glass. However, if you wish to override this and select scanning size manually, proceed to the following steps.

Note: You can select one of the following standard paper sizes.
- A3
- B4
- A4
- B5
- A5

The scanning area is referred to left rear of the ADF or FBS glass.

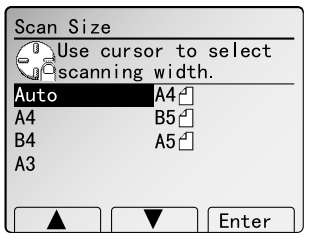


Note: When using a FBS glass, you can specify a different scan size for each page, but when using a ADF, only one size is allowed.

Note: To override auto document size detection, you have to set the scanning size at each page scanning.

To select the scanning size manually:

1. Place the document and select resolution and contrast you require.
2. Enter **NEXT**, **[ScanSize]**.
3. Select desired size by using a cursor key.
4. Press **[Enter]**.
5. Enter the fax number and press **START**.



Sending a fax

Using memory transmission

Your fax machine has a great memory! Take advantage of it, and you could:

Save Time. By using your fax machine's memory, you won't have to wait for your machine while it completes the transmission. Simply scan your document into your fax machine's memory, and you can walk away with your original in hand.

Save Money. If you're transmitting to another memory-equipped fax machine, your machine will send the document directly into the other machine's memory and hang up. (The receiving machine then prints out your message from its memory after the call has ended.) This cuts your actual on-line time to a minimum.

Save Even More Money. Set up a delayed command (see pages 2.10–2.11) to send your document after hours, and you can save more money, because the line charges will be cheaper.

The default transmission mode when the machine is turned on or when modes are cleared is memory transmission. You can change this setting, see below.

Note: Whether you decide to send your documents from memory or manually, you can override that choice one transmission at a time by pressing **MEMORY TRANSMIT** before you send your document. After completing the communication, your fax will return to the *default* setting.

Note: If you want to change the *default* setting of transmission mode, see "Memory transmission," on page 3.2.

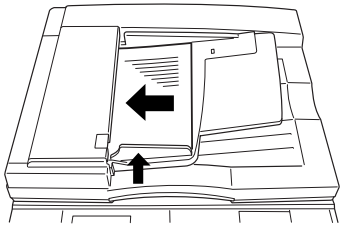
Note: Some documents use up memory more quickly than others. They include documents with many pages and those with many dark areas. *When the machine's memory is full, it can transmit only through the document feeder.*

Note: When you send a fax using the FBS glass, the memory transmission will be used automatically, even if the memory transmission is not set.

If the **MEMORY TRANSMIT** light glows, memory transmission is *on*.

If the **MEMORY TRANSMIT** light doesn't glow, memory transmission is *off*.

Sending a fax from the ADF



1 Adjust the document guides to fit the page(s) you'll be faxing. Your fax machine's ADF will hold up to 50 sheets of A4-sized paper, 25 sheets of B4-sized paper or 15 sheets of A3-sized paper.

2 Align the edge of your documents and stack them in the ADF **face up**.

3 *Adjust resolution and contrast if necessary.*
Press **RESOLUTION** to change the resolution.
Press **CONTRAST** to change the contrast.

4 *Adjust memory transmission if necessary.*
Press **MEMORY TRANSMISSION** to toggle memory transmission on and off.

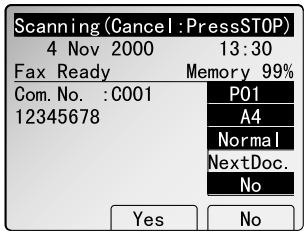
5 *Enter the fax number.*
Also, enter any access codes necessary, just as you would for a regular phone call. (Example: Enter *9* to "dial out" from an office telephone system, or *1* for long-distance.)

6 *Press* **START**.

By pressing **START**, you've just given your machine a command. In turn, your machine gives this action a command number as it scans the fax document.

This command number appears on the LCD while the machine is scanning the document:

You'll need to know this command number if you later wish to cancel the transmission or to print a stored document (see pages 1.1 and 2.11).



7 Now, everything is up to the machines — yours and the one you're dialling.

- If the fax has been set for *Quick Memory transmit*, your machine scans the first page of your document into memory, then dials the other fax. When it makes contact, your machine transmits the stored document from memory while at the same time scanning the remaining pages of your document into memory. (To set *Quick Memory transmission*, see page 3.2.)
- If the fax has been set for the *normal memory transmit*, your fax scans the entire document into memory, then dials the other fax. When it makes contact, your machine transmits the entire stored document from memory.
- If the fax is set for *non-memory transmission*, your machine simply dials the other fax. When it makes contact, your machine feeds the document through, scanning and transmitting it as it goes.

Note: The more "stuff" (called *black coverage*) your machine "sees" on a page, the slower the page feeds through as the fax scans it. And even if the page is relatively clean, sending it in grayscale mode or at certain resolutions makes your machine "see" more "stuff."
The same is true if you set the contrast to Dark.

Important: If you want to *cancel* a transmission while *scanning* the document, press the **STOP** key.

If you want to *cancel* a transmission in progress, use the *Review Commands* function. See "Review Commands, an introduction" page 1.11.

8 After transmission, the machine beeps and return to its standby mode.

Note: If the call fails, see "Redialling," page 1.11.

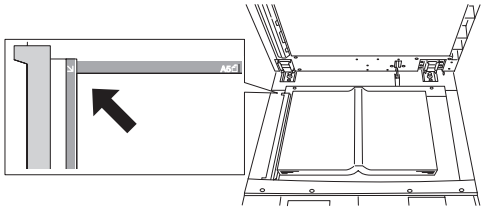
Sending a fax from the FBS glass

Set your document that cannot be placed in the ADF on the FBS glass one page at a time.

Note: The machine gives priority to the document on the ADF to make a copy or send a fax, when the documents are set both on the ADF and FBS glass.

1 If there's a document in the ADF, remove it.

2 Open the platen cover.



3 Place the document **face down** on the FBS glass and align it with the document scale on the rear and left, then gently close the platen cover. Make sure the document is set beyond the rear left corner.

Important: Gently close the platen cover so that you don't catch your hands, possibly injuring them.

Important: When sending a bound document, such as a book, the received image may contain some black areas. To reduce this effect, hold down the document to prevent its bound part from rising. However, ***do not press too strongly***. This may break the FBS glass and cause an injury.

4 *Adjust resolution and contrast if necessary.*
Press **RESOLUTION** to change the resolution.
Press **CONTRAST** to change the contrast.

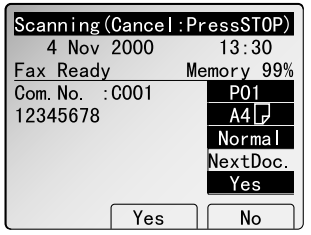
5 *Enter the fax number.*
Also, enter any access codes necessary, just as you would for a regular phone call. (Example: Enter *9* to "dial out" from an office telephone system, or *1* for long-distance.)

6 *Press* **START**.

By pressing **START**, you've just given your machine a command. In turn, your machine gives this action a *command number* as it scans the fax document.

This command number appears on the LCD while the machine is scanning the document into the memory.

You'll need this command number to cancel the transmission or to print a stored document (see pages 1.11 and 2.11).



7 If you want to send more pages, proceed to step 8.
Otherwise, press **START** to start the transmission, and skip to step 9.

8 Place the next page, then press **[Start]** to start scanning.

To send any more pages, repeat this step.
Otherwise, press **[Exit]** to start the transmission, and skip to step 9.

9 Now, everything is up to the machines — yours and the one you're dialling. When it makes contact, your machine transmits the stored document from memory.

Note: If you want to *cancel* a transmission while *scanning* the document, press the **STOP** key.
If you want to *cancel* a transmission in progress, use the *Review Commands* function. See "Review Commands, an introduction" page 1.11.

10 After transmission, the machine beeps and return to its standby mode.

Note: If the call fails, see "Redialling," page 1.11.

Sending a fax using monitor/call or a handset

You also can fax a document using either the monitor speaker or the optional handset to dial the call.

1 *Place the document in the ADF.*

Note: In this function, you cannot use the FBS glass.

2 *Adjust resolution and contrast if necessary.*

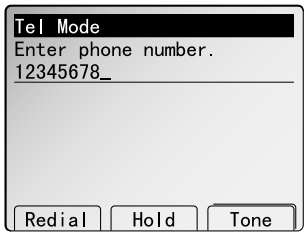
3 *Obtain a dial tone, either by:*

- Pressing **MONITOR/CALL**

... or ...

- Lifting the optional handset.

In either case, the LCD shows (see right):



4 *Enter the fax number.*
Also, enter access codes with the number, just as for a regular phone call.

5 *When you hear fax tones from the remote unit, press* **START.**

Note: If a person answers the phone, use the optional handset to tell that person you're trying to send a fax. When you hear fax tones, press **START.**

6 If you're using an optional handset, hang up after pressing **START**.

7 After transmission, the machine beeps and returns to its standby mode.

Note: If the call fails and you used **MONITOR/CALL** to dial, press **MONITOR/CALL** to hang up. Or if you've pressed **START** to begin the fax transmission, press **STOP** to end it.

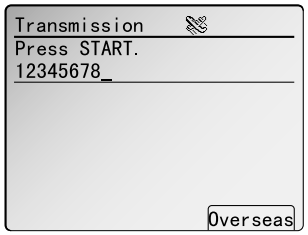
Also see "Redialling manually," next page, if the call fails.

Overseas transmission mode

This mode instructs your fax to compensate for the poor transmission characteristics of some overseas telephone lines. To set overseas mode:

1 Enter the fax number using the numeric keypad.

2 Press **NEXT** until the **[Overseas]** is appeared. Then press **[Overseas]**.



Note: This feature automatically deactivates itself following each dialling.

Redialling

If your fax call fails, your machine automatically redials it. In the *Auto Redial mode*, your fax *automatically redials* the number every minute until one of the following happens:

- It reaches the remote fax machine.
- It has attempted the two redials and has still not connected.

While in the *Auto Redial mode*, the machine can continue to receive faxes and can make as many as 100 fax transmissions.

Note: If you used either the speaker or a handset to dial, you must redial manually (see below).

Note: If the last redial attempt fails, your machine may print (and/or display) error messages.

Note: The default setting of redial attempts is as flowing:
Number of redials : 2 times
Redial interval : 1 minute.
You can change this setting as you want. See "Changing redial settings," page 3.6.

Redialling manually

You can always redial calls manually. And you *must* redial manually if you use either the monitor speaker or an optional handset to dial the failed call.

To redial a fax call manually *without* using the monitor speaker or an optional handset:

1. Make sure the document is in the ADF and that the resolution and contrast are set.
2. Press **[Redial]**, **START.**

To redial a fax call manually *with* the monitor speaker or an optional handset:

1. Make sure the document is in the ADF and that the resolution and contrast are set.
2. Press **MONITOR/CALL** or lift the optional handset to get a dial tone.
3. Press **[Redial].**
4. *When you hear fax tones from the remote unit, press* **START.**

   Note: If a person answers the phone, use the optional handset to tell that person you're sending a fax. When you hear fax tones, press **START.**

To redial a voice call manually using the optional handset:

1. Lift the optional handset to get a dial tone.
2. Press **[Redial].** When the other person answers, use the optional handset to speak to that person.

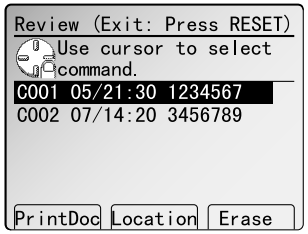
Review Commands, an introduction

Your fax machine can store many "jobs" in its memory. And it keeps track of each one by assigning it a *command number*, like "C001."

Delayed commands, redial attempts and current fax transmissions are all stored in your fax machine's memory and given a command number.

The Review Commands function gives you the power to check on each job (or *command*) in your machine's memory. It also lets you *cancel* a command if you decide not to send the document.

To cancel a command:



1. Press **REVIEW COMMANDS.**
   The LCD shows the command list, indicated by its command number, sending start day and time and the phone number it will dial.

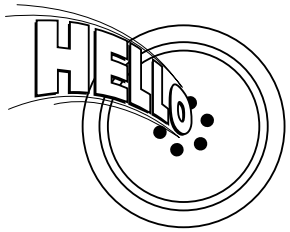
   Note: If a command is in progress, that command is shown with shade.
2. Select the command you want to cancel using the cursor key.
3. Press **[Erase]**. The command will be canceled.
4. If you want to cancel the other command, repeat steps 2–3.
   If you want to stop reviewing the stored commands, press **RESET** to return the machine to standby mode.

For more information on the Review Commands function, see page 2.11.

Receiving faxes

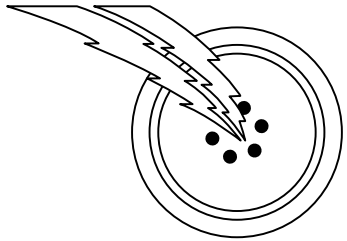
Answering calls manually

In any reception mode, you can always answer calls manually *if you have an optional handset installed.* Just pick it up, as you would if using a normal phone.



If you hear someone speaking to you, use your optional handset to speak back.

If you hear *fax tones* ("beep — beep — beep"), press **START** and hang up the optional handset. The fax machine will begin receiving a fax.



Note: Receiving this way disables "V.34" mode so that the machine receives the fax in normal ITU-T Group 3 fashion. (See page AI.1.)

Note: Don't try to answer a call by pressing **MONITOR/CALL.** The monitor function is for dialling only.

Answering fax calls using another phone, not the fax machine

If you have one phone line ringing to several phones in your office and *you have an optional handset attached to your fax*, there's no need to run to the fax machine to answer every call. If you happen to answer a fax call while you're at another extension, put the handset down, but don't hang up. Walk to the fax machine and pick up the optional handset. Then press **START**.

After you press **START**, hang up both the fax machine's handset and the second telephone's handset. Because remote fax machines will wait several seconds to hear reception tones from your unit, you have about 30 seconds to walk to your fax, pick up the handset, and press **START**.

Reception modes

Your fax machine has five different reception modes — *Tel Ready*, *Fax Ready*, *Fax/Tel Ready*, *Tel/Fax Ready* and *Ans/Fax Ready*. We'll explain each of these in this section.

Note: To change the reception mode, refer to the "EasyStart," on page 1.16 – 1.17 of General reference.

Tel Ready mode

Use it if:
- You want to use the same line for both fax and phone calls *and*
- On that line, you're using at least one other phone which is *not* connected to your fax machine *or*
- You have an optional handset installed on your fax machine

In this mode: Your fax machine never answers calls automatically. You must answer each call as described in "Answering calls manually" (this page, left column).

Fax Ready mode

Use it if: Your fax machine uses its own phone line and doesn't share it with a phone or an answering machine.

In this mode: Your fax machine answers each call and attempts to receive a fax.

Fax/Tel Ready mode

The Fax/Tel Ready mode is a combination of the Fax Ready and Tel Ready modes.

Use it if: An optional handset is installed on your fax machine
and
You're using the machine as both a fax machine and a telephone

In this mode: Your fax machine answers each call without ringing. If you receive a voice call, it alerts you with a special ring.

Your fax machine receives faxes silently *but also* alerts you when a regular voice call comes in. (Your fax machine also beeps once at the end of each reception.)

If a voice call comes in, your fax machine detects it and sounds a special ring. If you hear it, answer using your optional handset.

Note: This Fax/Tel Ready mode won't turn off ringers on other telephones in your house or office. Other phones won't distinguish between fax and voice calls.

Tel/Fax Ready mode

The Tel/Fax Ready mode is a combination of the Tel Ready and Fax Ready modes.

Use it if: An optional handset is installed on your fax machine
and
You're using the machine as both a telephone and a fax machine

In this mode: Your fax machine rings the number of times you've identified in the user settings. If you don't use the optional handset to answer the call, your fax machine answers the call. If a caller sends a fax, your machine begins receiving it. If a voice call comes in, your machine detects it and sounds a special ring, telling you to answer using the optional handset.

Ans/Fax Ready mode

Use it if: You're using an answering machine that's connected directly to your fax machine.

In this mode: An answering machine connected to your fax machine answers each call. If a voice call comes in, the answering machine begins to record the incoming message. If your fax machine hears a fax tone, it begins receiving the fax message.

Using an answering machine with your fax machine

To connect your answering machine to your fax machine:

1. Set the fax machine for Ans/Fax Ready.
2. Set your answering machine to answer calls after *no more than* two rings. (See the answering machine's instructions if necessary.)
3. Create a new outgoing message on your answering machine. Here's a suggested message:

   Hello! You've reached [your name or telephone number]. To leave a ***voice*** *message, please wait for the beep. To send a* ***fax****, press* **START** *on your fax machine. Thanks for calling!*

   Important: Your answering machine's outgoing message must be *no longer than* 10 seconds.

If the paper runs out

Getting the word from your machine

When your fax machine runs out of paper, the machine beeps, the **ALARM** light glows and the LCD indicates which source has run out of paper.

Your fax machine cannot *print* fax messages or copies without paper. But it can still receive documents into its memory, as described in the section below.

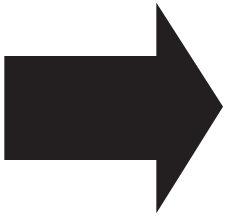
Receiving when out of paper

If your machine runs out of paper, it stores up to 250 fax *receptions* in its memory. This is called *out-of-paper reception*. Once you refill the paper supply, the fax machine prints the stored messages automatically.

Note: The number of *pages* (not *receptions*) your fax machine can store for out-of-paper reception will vary. It depends on:

- Your machine's memory capacity
- Types of documents being sent to your machine
- Resolution of documents being sent to your machine

Beyond the basics



Autodialer 2.1

Broadcasting 2.9

Delayed transmission 2.10

Batch transmission 2.12

Special features 2.15

F-Code communication 2.27

Programmable one-touch keys 2.37

Security features 2.44

Autodialer

Your fax machine's *autodialer* stores your most frequently called phone and fax numbers for instant recall so you don't have to remember them. It's something like an electronic phone book.

Autodialer basics

How do you autodial?

There are two kinds of autodialer numbers. The difference between the two is how you dial them:

Type	How to dial	Amount stored
One-touch	Press one of the keys, marked **01–78** on the right side of the control panel	78
Speed-dial	Press **SPEED DIAL/TEL INDEX** followed by a three-digit identifier, from *001* to *222*	222
Total amount of numbers stored		**300**

Autodialling fax and phone numbers

Your fax machine's autodialer will hold more than just fax numbers. You can store phone numbers, too.

This is because when you use the autodialer to dial a number, the fax checks to see if there's a document in its feeder. If there is, the machine dials as a fax machine. If there isn't, it dials as a phone.

Location IDs and the EasyDial directory

When you store numbers in your autodialer, you can give these numbers descriptive names, such as "Chicago office" or "Billing department". Your machine calls this name a *Location ID*.

Your machine's autodialer sorts these location IDs alphabetically. Using your *EasyDial directory*, you can look up these numbers by their descriptive names, just as if you were using a phone book.

We'll explain how to store the numbers and location IDs in the next few pages. The EasyDial directory is discussed in detail on page 2.8.

Special Dialling Characters

Your fax machine allows you to enter special dialling characters when programming the autodialer. These characters include hyphens and dashes, which make phone numbers easier to read, and special characters needed for international calls.

The chart below briefly describes each of these characters. It also tells you what keys to press on your fax machine to store those characters in your autodialer:

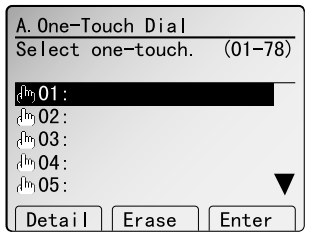
Char.	What it does	Keystroke(s)
–	Makes long numbers easier to read. Doesn't change fax machine operation.	Press **[–]**
/	*(Has no effect in the Europe..)*	Press **[2nd Tone]**
!	*(Has no effect in the Europe..)*	Press **[1st Tone]**
– /	Enters a pause. Each pause lasts two seconds (or whatever length you set; see page 3.6). Each pause uses *two* of the characters you can store in one phone number.	Press **[Pause]**
– !	If your fax machine is on a pulse (*not* tone-dialling) line, switches from pulse-dialling to tone ("DTMF")-dialling. Use after the actual phone number but before any characters (such as a long-distance carrier's access code) which must be in DTMF tone. *Do not* use on a tone line.	Press **[Tone]**
/	Enter "flash" signal to exchange PBX to PSTN before actual phone number. However, "/" must be entered to the first of number	**Soft key** which is assigned the flash signal. (See page 2.15.)

Using one-touch numbers

Your fax machine stores up to 78 one-touch numbers using the keys marked **01–78**.

Entering or changing a one-touch number

1 Press **MENU, A, [Enter].**
The LCD shows the one-touch number list.

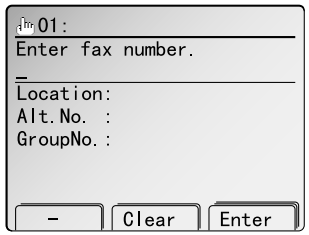


2 Select the one-touch key in which you want to store a number or change a previously stored number.

Note: You can select the one-touch key by pressing that key on the control panel.

Note: You can press **[Detail]** to see the number which has been programmed in that one-touch key.

3 Press **[Enter].**



4 Use the numeric keypad to enter the number *exactly* as your machine should dial it, including whatever access codes your phone system requires. (You may want to review "Special dialling characters," page 2.1.) The number can be up to 40 characters in length.

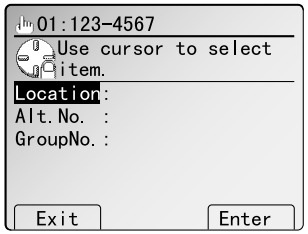
Note: You must enter the fax number to program the one-touch key.

Note: If a fax number is already registered in this one-touch key, the number is shown on the LCD. If you wish to change the fax number, press the **[Clear]** to erase it and then enter another number.

Note: If want to erase characters, press **[Clear]** to erase to the left. If you want to change just one character in the number, move the cursor to that character, and press **[Clear]** to erase it. Then re-enter the character correctly.

5 When the number is as you want it, press **[Enter]** to store it.

6 Next, the LCD now displays (see right): You can also program the following three items:



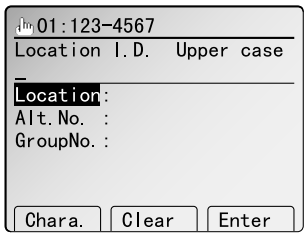
- **Location ID** — The destination name. If you enter the name, you can use the EasyDial directory dialling function (see page 2.8).
- **Alternative number** — After all redial attempts to the regular number fail, your fax machine will dial this alternative number. If the alternative number also fails, the fax alarm beeps to alert you to a problem.

  Note: Your fax holds a maximum of 10 alternative numbers in all, that is, only 10 speed-dials or one-touch numbers can have the alternative number. After you have entered the alternative numbers for 10 speed-dials or one-touch numbers, the machine will disable to enter the alternative number.
- **Group number** — If you enter the group number, you can use the group dial transmission function. (See "Using call group," in page 2.7.)

Note: If you wish to omit these settings, press **[Exit]** then go to step 16.

7 To enter the *Location ID*:

Select the **"Location"** and press **[Enter]**.



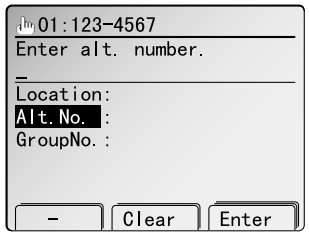
Note: If a Location ID is already registered in this one-touch key, it is shown on the LCD. If you wish to change the location ID, press the **[Clear]** to erase it and then enter another location ID.

8 Enter the Location ID. (Regarding how to enter the character, see "Entering character" on page 1.14 in General reference.) A number's Location ID may be up to 24 characters in length.

9 Press **[Enter]** to save the setting and continue.

10 To enter the *Alternative number*:

Select the **"Alt.No."** and press **[Enter]**.



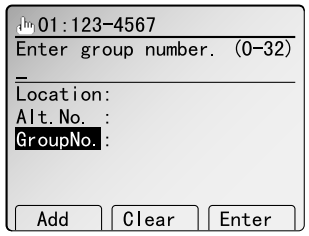
Note: If a alternative number is already registered in this one-touch key, it is shown on the LCD. If you wish to change alternative number, press the **[Clear]** to erase it and then enter another number.

11 Enter the alternative number using the numeric keypad. The number can be up to 40 characters long.

12 Press **[Enter]** to save the setting and continue.

13 To enter the *Group number*:

Select the **"Group No."** and press **[Enter]**.



Note: If a group number is already registered in this one-touch key, it is shown on the LCD. If you wish to change group number, press the **[Clear]** to erase it and then enter another group number.

14 Use the numeric keypad to enter the call groups for this number. There are 32 possible call groups, numbered 1–32.

If you want to assign the number to more than one call group, insert a *comma* after each number (except the last one) by pressing **[Add].**

Note: To assign this number to all 32 call groups, enter *0* (zero).

15 Press **[Enter]** to save the setting.

16 Press **[Exit]**.
If you *do* want to enter *another* one-touch number, go back to step 2.
If you *do not* want to enter any more one-touch numbers, press **RESET** to finish.

Use the autodialer labels in your fax's packaging to write down the stored numbers for easy reference.

If you have entered the group number, you can also print out a directory of your call groups.(See page 2.7.)

Erasing a one-touch number

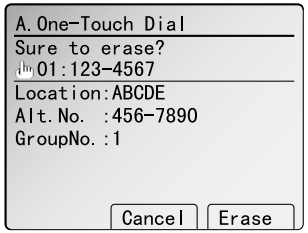
1 Press **MENU, A, [Enter].**
The LCD shows the one-touch number list.

2 Select the one-touch key which you want to erase.

Note: You can select the one-touch key by pressing that key on the control panel.

Note: You can press **[Detail]** to see the number which has been programmed in that one-touch key.

3 Press **[Erase].** The LCD shows (see right):



Important: If you want to quit without erasing the one-touch number you've selected, press **[Cancel].** The fax will return to step 2.

4 Press **[Erase]** to erase the number.

To erase another one-touch number, repeat steps 2–4.
Or press **RESET** to return to standby mode.

Printing a list of one-touch numbers

Forgot which number is stored in which one-touch key? Just print a list of your one-touch numbers. The list includes each key's number, the Location ID (if any), fax/telephone number and group number(s) you've stored in the key.

To print a list of one-touch numbers, press **MENU, A, [List].**

One-touch *fax* dialling

To dial a *fax* call using a one-touch number:

1. Place the document and select resolution and contrast you require.
2. Toggle between transmission from the feeder or from memory if necessary, by pressing **MEMORY TRANSMIT.**
3. Press the one-touch key in which you've stored the number.

One-touch *phone* dialling

To dial a *phone* call using a one-touch number, you *must* have an optional handset attached to your machine. (Contact your authorized Muratec dealer to order an optional handset.)

To make the call:

1. Obtain a dial tone by doing one of the following:
   - Lift the handset
   - Press **MONITOR/CALL** to use the monitor speaker
2. Press the one-touch key in which you've stored the phone number.

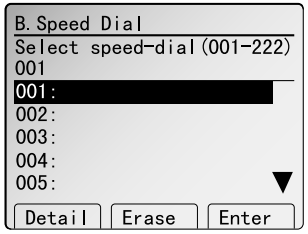
Note: Remember that your fax machine's monitor speaker is *not* a speakerphone. If you dialled by using the monitor speaker, pick up the handset to speak to the person that answers.

Note: If the call fails, and you used **MONITOR/CALL** to dial, press **MONITOR/CALL** to hang up.

Using speed-dial numbers

Your fax machine can store up to 222 speed-dial numbers, designated by three-digit identifier codes from *001* through *222*.

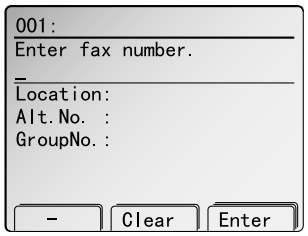
Entering or changing a speed-dial number



1. Press **MENU, 8, [Enter].**
   The LCD shows the speed-dial number list.
2. Select the speed-dial number in which you want to store a number or change a previously stored number.

   Note: You can select the speed-dial number by directly entering that three-digit identifier code. When entering the identifier code for speed-dial numbers less than 100, you must enter leading zeroes to make three digits. For example, *001-099*.

   Note: You can press **[Detail]** to see the number which has been programmed in that speed-dial number.



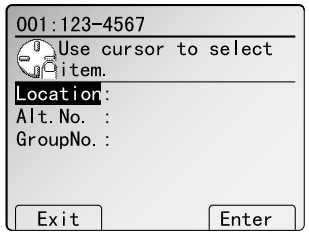
3. Press **[Enter].**
4. Use the numeric keypad to enter the number *exactly* as your machine should dial it, including whatever access codes your phone system requires. (You may want to review "Special dialling characters," page 2.1.) The number can be up to 40 characters in length.

   Note: You must enter the fax number to program the speed-dial number.

   Note: If a fax number is already registered in this speed-dial number, the number is shown on the LCD. If you wish to change the fax number, press the **[Clear]** to erase it and then enter another number.

   Note: If want to erase characters, press **[Clear]** to erase to the left.
   If you want to change just one character in the number, move the cursor to that character, and press **[Clear]** to erase it. Then re-enter the character correctly.
5. When the number is as you want it, press **[Enter]** to store it.

6 Next, the LCD now displays (see right):
You can also program the following three items:



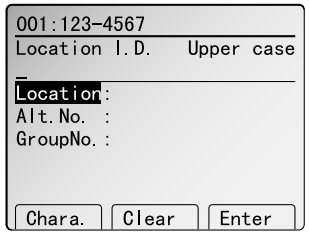
- **Location ID** ("Location" on the LCD) — The destination name. If you enter the name, you can use the EasyDial directory dialling function (see page 2.8).
- **Alternative number** — After all redial attempts to the regular number fail, your fax machine will dial this alternative number. If the alternative number also fails, the fax alarm beeps to alert you of a problem.

  Note: Your fax holds a maximum of 10 alternative numbers in all, that is, only 10 speed-dials or one-touch numbers can have the alternative number. After you have entered the alternative numbers for 10 speed-dials or one-touch numbers, the machine will disable to enter the alternative number.
- **Group number** — If you enter the group number, you can use the group dial transmission function. (See "Using call group," page 2.7.)

Note: If you wish to omit these settings, go to step 16.

7 To enter the *Location ID*:

Select the **"Location"** and press **[Enter]**.



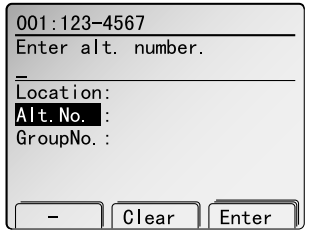
Note: If a Location ID is already registered in this one-touch key, it is shown on the LCD. If you wish to change the location ID, press the **[Clear]** to erase it and then enter another location ID.

8 Enter the Location ID. (Regarding how to enter the character, see "Entering character" on page 1.14 in General reference.) A number's Location ID may be up to 24 characters in length.

9 Press **[Enter]** to save the setting and continue.

10 To enter the *Alternative number*:

Select the **"Alt.No"** and press **[Enter]**.



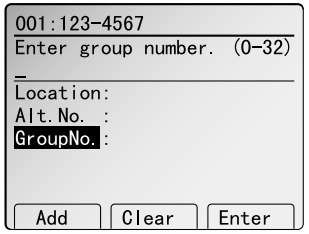
Note: If a alternative number is already registered in this one-touch key, it is shown on the LCD. If you wish to change alternative number, press the **[Clear]** to erase it and then enter another number.

11 Enter the alternative number using the numeric keypad. The number can be up to 40 characters long.

12 Press **[Enter]** to save the setting and continue.

13 To enter the *Group number*:

Select the **"Group No."** and press **[Enter]**.



Note: If a group number is already registered in this one-touch key, it is shown on the LCD. If you wish to change the group number, press the **[Clear]** to erase it and then enter another group number.

14 Use the numeric keypad to enter the call groups for this number.
There are 32 possible call groups, numbered *1–32*.

If you want to assign the number to more than one call group, insert a *comma* after each number (except the last one) by pressing **[Add].**

Note: To assign this number to all 32 call groups, enter *0* (zero).

15 Press **[Enter]** to save the setting.

16 Press **[Exit]**.
If you *do* want to enter *another* speed-dial number, go back to step 2.
If you *do not* want to enter any more speed-dial numbers, press **RESET** to finish.

If you have entered the group number, you can also print out a directory of your call groups.(See page 2.7.)

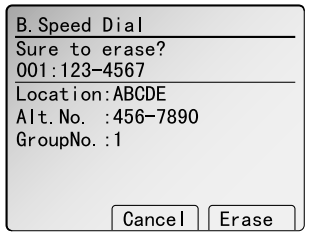
Erasing a speed-dial number

1. Press **MENU, B, [Enter].**
   The LCD shows the speed-dial number list.
2. Select the speed-dial number in which you want to store a number or change a previously stored number.

   Note: You can select the speed-dial number by directly entering that three-digit identifier code. When entering the identifier code for speed-dial numbers less than 100, you must enter leading zeroes to make three digits. For example, *001-099*.

   Note: You can press **[Detail]** to see the number which has been programmed in that speed-dial number.
3. Press **[Erase].** The LCD shows:

   Important: If you want to quit without erasing the speed-dial number you've selected, press **[Cancel].** The fax will return to step 2.



4. Press **[Erase]** to erase the number.

To erase another speed-dial number, repeat steps 2–4.
Or press **RESET** to return to standby mode.

Printing a list of speed-dial numbers

You can easily print a list of your speed-dial numbers. The list includes each number's three-digit identifier, the Location ID (if any), number and any group numbers you've stored for that speed-dial number.

To print a list of speed-dial numbers, press **MENU, B, [List].**

Fax dialling via speed-dial

To dial a fax call using a speed-dial number:

1. Place the document and select the resolution and contrast you require.
2. Toggle between transmission from the feeder or from memory if necessary, by pressing **MEMORY TRANSMIT.**
3. Press **SPEED DIAL/TEL INDEX.**
4. Use the numeric keypad to enter the three-digit identifier for the speed-dial number you want to dial.

   Note: If the location ID has been programmed, it is shown on the LCD. Otherwise, the fax number is shown on the LCD.
5. Press **START**.

Phoning via speed-dial

To dial a phone call using a speed-dial number, you *must* have an optional handset attached to your machine. To make the call:

1. Obtain a dial tone by doing one of the following:
   - Lift the handset
   - Press **MONITOR/CALL** to use the monitor speaker
2. Press **SPEED DIAL/TEL INDEX.**
3. Use the numeric keypad to enter the three-digit identifier for the speed-dial number you want to dial.

Note: Remember that your fax machine's monitor speaker is *not* a speakerphone. If you dialled using the monitor speaker, pick up the handset to speak to the person that answers.

Note: If the call fails, and you used **MONITOR/CALL** to dial, press **MONITOR/CALL** to hang up.

Using call group

If you frequently send the same fax message to more than one location, store the *group number* into your autodialer. (If necessary, see "Using a one-touch dial" and "Using speed-dialling", in previous page.)

After you store the group number, you can send the same fax to many different locations. For example, one call group may include all of your clients in one city, another group may include all of your employees and another may include all your vendors.

Your machine can:

- Store as many as 300 numbers in up to 32 call groups
- Store one number in as many as 32 different groups

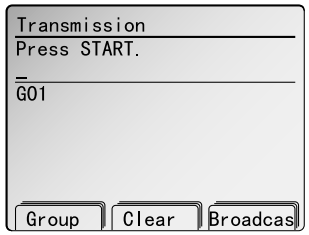
Send a fax via call group

Note: The group number dialling can be used only for memory transmission.

1 Place the the document and select resolution and contrast you require.

2 Press **[Group]**.

3 Use the numeric keypad to enter the group number you want to send a fax.



Note: If you want to send a fax to other group at a time, press **[Broadcas]** then repeat steps 2-3. You can also enter the other location using either one-touch key, speed-dial number or numeric keypad.

4 Press **START**.

Printing a group directory

Your machine can also print a *call group directory*. This lists all your stored autodialer numbers by Location ID and lists the groups to which these numbers belong.

The directory divides the call groups into four banks, *01–09 (the list shows 00), 10–19 (the list shows 10), 20–29 (the list shows 20)* and *30–32 (the list shows 30)*. If you specify call group *0* (which puts the number in all call groups), the directory shows all numbers (see below).

For example, the directory might show:

No.	Location	00	10	20	30
S001	And Sew I	2 4			
S002	KC Enterp	7	0	1	
S003	Katz Cat			0	2
#01	Carson Co	4	0 4		
#02	Tex. Ofc.	1			
#03	e.e.gummi	123456789	0123456789	0123456789	012

In this list, speed-dial number 001 *(S001)* is in call groups 2 and 4; speed-dial number 002 *(S002)* is in groups 7, 10 and 21; speed-dial number 003 *(S003)* is in groups 20 and 32; one-touch number 01 *(#01)* is in groups 4, 10 and 14; one-touch number 02 *(#02)* is in group 1; and one-touch number 03 *(#03)* is in all groups, 1 to 32.

To print a call group directory, press **MENU, H, [List].**

EasyDial directory dialling

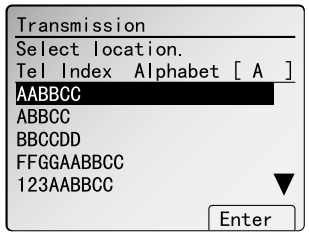
EasyDial directory dialling makes your autodialer even more like an electronic phone book. EasyDial sorts and displays numbers alphabetically according to their Location IDs, so you can find them and dial them easily.

To dial using EasyDial:

1 *For a fax call:* Place the document and select resolution and contrast you require.
For a regular phone call: Lift up the optional handset.
Make sure there's no document on the ADF and FBS glass, then skip to step 3.

2 If you want to toggle between transmission from memory and transmission from the feeder, press **MEMORY TRANSMIT.**

3 Press **SPEED DIAL/TEL INDEX** *twice.*
The LCD shows the listing in your fax machine's EasyDial directory.



The EasyDial directory sorts entries alphabetically in the following order:
(1) by alphabet
(2) by number
(3) by symbol.

4 Scroll through the listings to find the one you want by using the cursor key.

Note: To quickly search, press capital letter of Location I.D. using one-touch key.

5 When the LCD shows the name (Location ID) you want to dial, press **START.**

- If there *is* a document on the ADF or FBS glass, your machine will dial a *fax call.*
- If you have lift up optional handset, your machine will dial a regular phone call.

If an EasyDial call fails

If an EasyDial call fails, what happens next depends upon the kind of call it was.

If it was a fax call …

… Your fax machine automatically redials the number according to the redial interval you've set (see page 3.6). It keeps trying until either of the following occurs:

- It successfully reaches the other number
- It has attempted the number of redials programmed and has still not connected (see "Changing redial settings," page 3.6).

If it was a regular phone call …

… You'll have to redial manually:

1 Obtain a dial tone by **either** lifting the handset or pressing **MONITOR/CALL.**

2 Press **REDIAL/PAUSE.**

Note: If the call fails and you used **MONITOR/CALL** to dial, press **MONITOR/CALL** to hang up. Or if you've pressed **START** to begin the transmission, press **STOP** to end it.

Broadcasting

Broadcasting basics

The fastest way to fax *one* document to *many* recipients is to *broadcast* it.

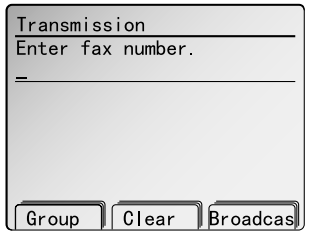
In an ordinary broadcast, you send the fax as you normally would, except you add more fax numbers. You can enter up to 330 numbers:

- 30 manually-dialled numbers ***AND***
- 300 autodialer numbers ***OR*** 1 call group with all 300 autodialer numbers

You can broadcast using *any* function that requires a fax number to be entered. That means you can send a *delayed* broadcast, program a *polling* broadcast and even broadcast to "hub" units for F-Code *relay broadcast initiation*. All of these are explained in this chapter.

To send a broadcast fax:

1. Insert the document and make any necessary adjustments as you would for a regular fax transmission.
2. Press **[Broadcas]**.
3. Enter the *first* fax number, as usual. Use either a one-touch number, a speed-dial number, a call group or a regular number dialled from the numeric keypad.
4. To add more fax numbers, press **[Broadcas]** between each one. Then enter the number as described in step 3. You can send to up to 330 numbers for a broadcast.



Note: If you enter characters by mistake, press **[Clear]** to erase them. Or press ▲ or ▼ of the cursor key to select the number then press **[Clear]**.

5. Press **START**. Your fax machine scans the document into memory and then sends it to each number or call group you've entered.

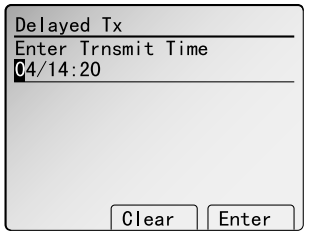
Delayed broadcasting

What if you want the broadcast to take place later? That's the purpose of setting up a *delayed broadcast*.

Note: Delayed commands are discussed in detail later. You may want to read "Delayed transmission" on page 2.10 before proceeding.

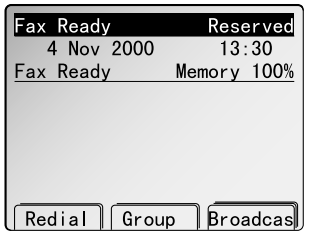
1. Follow steps 1–4 of "Broadcasting basics" (left column).
2. Press **MENU**.
3. Select **"Delayed Tx"** using the cursor key. Then press **[Enter]**. The LCD shows current day and time.
4. Use the numeric keypad to enter the day of the month and time (in 24-hour format) when you want the broadcast to occur.

   When finished, press **[Enter]** to save the setting.



5. Press **START**. Your machine will return to standby mode, while showing this on the LCD:

   This means your fax machine is "Reserved" for the delayed broadcast you just programmed, but it can still be used to send and receive faxes if your broadcast document is stored in memory.



Making changes to broadcasts

If you need to make changes in a broadcast after setting it up, use the **REVIEW COMMANDS** function. See "Reviewing or cancelling parts of a broadcast," page 2.11.

Delayed transmission

Take advantage of lower evening and weekend long-distance rates with *delayed transmission*. Your fax machine can store up to 100 delayed commands, each of which you can program up to 31 days in advance.

Important: If you program all 100 delayed transmission commands, no *memory* transmission is possible until one or more of the commands is completed. (To review memory transmission, see pages 1.18 and 3.2.) However, if all 100 delayed commands are programmed, you can always transmit manually using monitor/speaker dialling or an optional handset (see page 1.10).

Setting up a delayed transmission

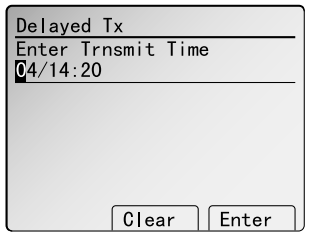
Important: Your machine only remembers the *day* of the month that it's supposed to send a delayed transmission. It does not remember the month itself. So if you want to send a transmission at 5:0**5** PM on **June** 26, don't program the transmission sooner than 5:0**6** PM on **May** 26.

To set up a delayed transmission:

1 Place the document and make any necessary adjustments.

2 Press **MENU**.

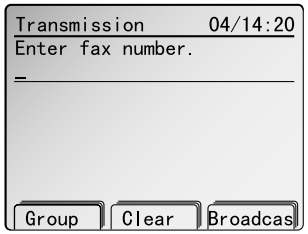
3 Select **"Delayed Tx"** and press **[Enter]**. The LCD shows the current day of the month, followed by the current time (in 24-hour format).



4 Use the numeric keypad to enter the day of the month and the time when you want the fax to send the delayed transmission.

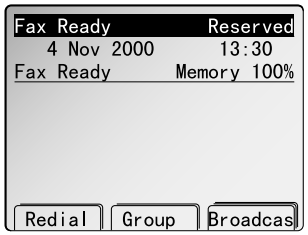
5 When the date and time are entered, press **[Enter]** to save the delayed transmission. The LCD shows:

6 Enter the fax number for the delayed transmission document. You can either press a one-touch key, enter a speed-dial number or use the numeric keypad to enter the fax number.



Note: If you want to erase characters, press **[Clear]** to erase to the left.
If you want to change just one character in the number, move the cursor by using cursor key, and press **[Clear]** to erase it. Then re-enter the number correctly.

7 Press **START**. Your machine returns to standby mode, while showing this on the LCD:



This means your fax machine is "Reserved" for the delayed transmission you just programmed.

- If you set the machine for *memory transmission*, it will scan the document into memory, after which you can use the machine normally.
- If you set the machine for *manual transmission*, the machine can *receive* faxes but can't *transmit* until your delayed command has been performed.

Important: If you've stored too much information in your machine's memory, a "Memory Overflow" message may appear on the LCD. This appears because **(1)** too many pages have been stored in the memory, **or (2)** the pages that are stored have too much information on them for your fax machine to remember.
If this message appears, press **START** to tell your fax to keep as many pages in memory as possible, or press **CANCEL** to delete from memory all pages stored during the current operation (but not previous operations).

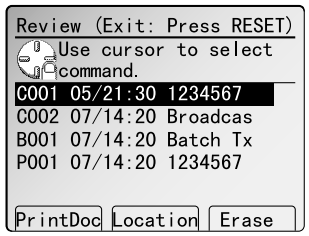
Reviewing or cancelling delayed commands

If you've stored a delayed command in your fax machine, it will hold it in memory until it either completes the command successfully or reaches its maximum number of redial attempts (see pages 1.11 and 3.6). Your machine can store up to 100 delayed commands. It identifies each by a three-digit *command number* ranging from *001* to *100*.

To see your machine's stored commands or to cancel them:

1 Press **REVIEW COMMANDS.**

- **If there are no stored commands in your machine** — It beeps briefly and displays "No command stored" on the LCD. It then returns to standby mode.
- If there *are* commands in your machine's memory, the LCD shows:



Here, you see *command 001*, followed by the transmit day and time, and number it's set to dial. If the command is to send a *broadcast*, "Broadcast" appears instead of the phone number. (See "Broadcasting," page 2.9.)

If the command is to send a *batch transmission*, the LCD shows its *batch box number* (such as "B001") rather than the command number. (See "Batch transmission," pages 2.12–2.14.)

If the command is for a *continuous polling operation*, the LCD shows its *continuous polling operation number* (such as "P001") rather than the command number. (See "Polling," on pages 2.22–2.23.)

Note: If your machine is attempting to perform a command *now*, it appears with shaded on the display.

Note: If the command is for Broadcast, Batch transmission or Continuous polling, you can use the [Location] key to confirm the remote fax numbers.

2 Using the cursor key to scroll through currently stored commands.

3 If you want to cancel the command, select command and then press **[Erase]**.

4 To return your machine to standby mode, press **RESET**.

Note: See also "Reviewing or cancelling parts of a broadcast," next column.

Reviewing or cancelling parts of a broadcast

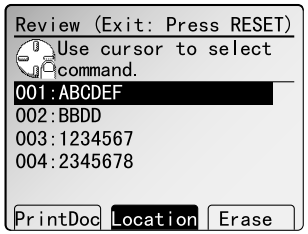
You also can review or cancel certain numbers within a broadcast:

1 Press **REVIEW COMMANDS.**

2 Using the cursor key to scroll through currently stored commands.

3 If you want to cancel the command you select, press **[Erase]**.
If you want to review *individual* numbers within this broadcast, go on to step 4 *without* pressing **[Erase]**.

4 To review *individual* numbers within this broadcast, press **[Location]**.
The LCD shows (see right):



5 Using the cursor key to select the number you want to cancel.

6 Press **[Erase].**
If you want to cancel a different number, repeat steps 5–6.
If you don't want to cancel any more numbers, press **RESET**.
The machine returns to standby mode.

Printing a delayed command list

Your machine can print a *command list* which tells you:

- The command's identification number
- The phone number, or "remote location"
- The start time (this appears in a *DD,HH:MM* format)
- A "note" telling if the command is a *polling* or *F-Code* operation (see pages 2.27–2.36 for more on *polling* and 2.22–2.23 for more on *F-Code communication*).

To print a delayed command list, press **MENU, F, [List].**

Printing a stored document

Your fax machine can print out each document stored for delayed transmission. To print a stored document:

1 Press **REVIEW COMMANDS.**

2 Select the command using the cursor key.

3 Press **[PrintDoc]**. Your fax machine will print a copy of the stored document.

Batch transmission

Batch transmission allows you to store multiple documents in an electronic "basket" throughout the day and then fax that entire basket to *one* location.

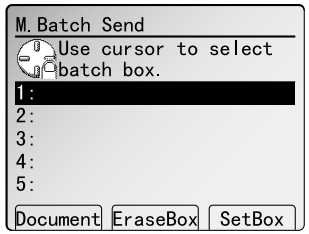
To do this, just tell the machine when and where the transmission should go. When that date and time arrives, your machine will transmit each document in the batch box to the remote fax machine. You can store up to 40 documents (each document can include one page or many pages) into your machine's five electronic *batch boxes*.

Creating or modifying a batch box

Before sending a batch transmission, you have to create batch boxes in your fax machine. The steps below also let you modify existing batch boxes.

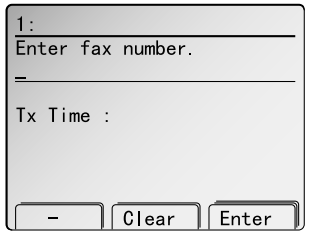
To create or modify a batch box:

1 Press **MENU, M, [Enter]**. The LCD will show the batch box list.



2 Using the cursor key to select the batch box you want to create or modify.

3 Press **[Set Box]**. The **LCD** will show (see right):



4 Use the numeric keypad to enter the fax number *exactly* as your machine should dial it, including whatever access codes your phone system requires. (You may want to review "Special dialling characters," page 2.1.) The number can be up to 40 characters in length.

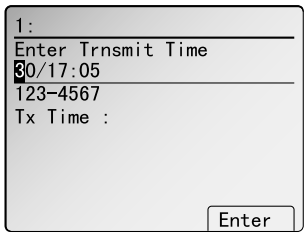
Your display can show only 26 characters at a time. To view characters beyond those 26, scroll the cursor by using the cursor key.

Note: If you want to erase characters, press **[Clear]** to erase to the left. If you want to change just one character in the number, move the cursor by using cursor key, and press **[Clear]** to erase it. Then re-enter the number correctly.

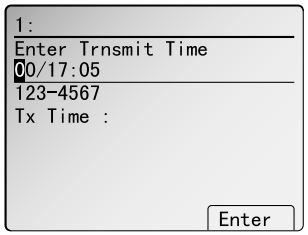
5 Press **[Enter]** to save the number.

6 Next, instruct your fax to send from this batch box in *one* of the following ways:

Option 1: At a certain time on a certain day of the month (*For example:* "Do this at 5:05 PM on the 30th.") — Use the numeric keypad to enter the date and time (*24-hour format*) the machine should send the documents from the batch box:



Option 2: At a certain time *each day you press the key* (*For example:* "Do this at 5:05 PM today.") — Use the numeric keypad to enter **0, 0** (*00*), and then the time when the fax should send the documents from the batch box:



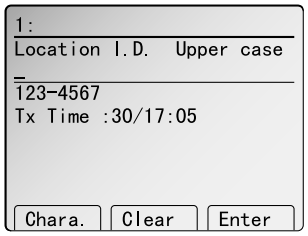
Note: To change a digit in the date or the time, move the cursor by using cursor key. Then enter the correct number.

7 When the date and time are set, press **[Enter]**.

8 The LCD now displays:

The machine now asks you to name this batch box.

If you *do not* want to enter or change this batch box's name, skip to step 10.



9 Enter the name the same way you entered your fax name during EasyStart.
A batch box's name may be up to 24 characters in length.

10 Press **[Enter]** to save the batch box information.

To create or modify another batch box, repeat steps 2–10. To finish, press **RESET.**

Printing a list of batch boxes

You can easily print a list of your batch boxes. The list includes each box's identifier number, the Location ID, fax number and date/time the transmission should start.

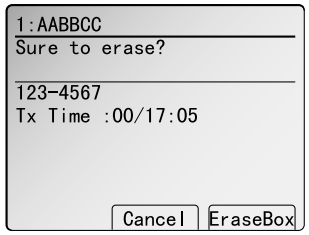
To print the list, press **MENU, M, [Box List].**

Erasing an empty batch box

Batch boxes must be empty to be erased. If a box has documents stored in it, then you first have to erase those documents. (See "Erasing a document stored in a batch box," page 2.14.)

To erase an empty batch box:

1. Press **MENU, M, [Enter].**
2. Select the batch box you want to erase.
3. Press **[EraseBox].**
   If the batch box is empty, the LCD shows (see right):



   Important: If you want to quit without erasing the batch box you've selected, press **[Cancel]**. The machine will return to step 2.

   Important: If you want to quit without erasing *any* batch box, press **RESET.** The machine returns to standby mode.
4. Press **[EraseBox]** to erase the batch box.

To erase another batch box, repeat steps 2–4. To finish, press **RESET.**

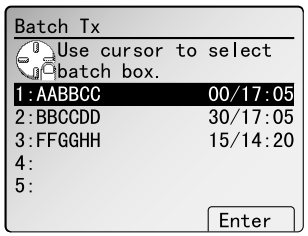
Storing a document for batch transmission

Your fax machine can store up to 40 *documents* (each document can include one page or many pages) in each batch box until the date and time you designate the batch transmission to take place. Once the batch documents are transmitted, they are automatically erased from the machine's memory.

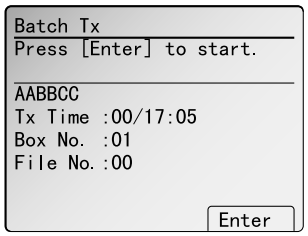
Note: For this operation to work, the batch box must exist on your fax machine.

To store a document in a batch box for batch transmission:

1. Insert the document and make any necessary adjustments.
2. Press **MENU,** select **"Batch Tx"** and then press **[Enter].** The LCD shows the batch box name and transmission time:
3. Select the batch box you want to use.



4. Press **[Enter].** The LCD shows (see right): Your machine gives each document in a batch box a *file number*, shown as *01* above. You will need to know this file number should you later wish to erase or print the stored document. Each batch box holds up to 40 files (*01-40*).



5. Press **[Enter]**. The machine displays "Reserved" on the top line of the LCD. This means the document is stored in memory.

Printing a document stored in a batch box

To print a document stored in a batch box:

1. Press **MENU, M, [Enter].**
2. Select the batch box storing the document you want to print.
3. Press **[Document].**
4. Select the document's file number (*01–40*).
5. Press **[PrintDoc]**. Your fax machine prints the document, then returns to standby mode.

Erasing a document stored in a batch box

To erase a document stored in a batch box:

1. Press **MENU, M, [Enter].**
2. Select the batch box storing the document you want to erase.
3. Press **[Document].**
4. Select the document's file number (*01–40*).
5. Press **[EraseDoc]** twice. The fax machine erases the document you've chosen, then returns to standby mode.

Special features

Your fax machine has numerous special features to make your communication easier. We'll cover them here.

Soft Keys

Soft Keys are shortcut keys. You can program the soft keys on the control panel to turn on or off any function with just the touch of a button. Your machine has four Soft Keys. If the light above any one of these keys glows, that means the setting programmed into that key is active.

These keys are programmed at the factory to turn the following functions on or off:

- Confirmation stamp (see page 3.3)
- Security reception (see pages 2.44–2.45)
- Monitor/Call (see page 1.10)
- Memory transmission (see pages 1.8 and 3.2)

Note: The keys that are programmed at the factory turn the functions above them on and off, but only for the next transmission that you send from your fax machine. Once that transmission is complete, your machine returns to its default setting.

But instead of using the Soft Keys to control the functions above, you can program them to turn other functions on or off. These functions are:

- TTI Tx— Normally, when you send the fax message, your TTI will be printed at the top of document you send. If you programmed TTI Tx into a Soft Key, you can disable to send your TTI by simply pressing that Soft Key.
- Cover page (see page 2.21)
- Confirmation report (see page 2.19)
- Flash — Lets you quickly disconnect a call and go right to the next one without having to hang up the handset.

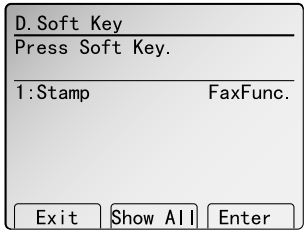
Note: And instead of just turning the function on or off for the next transmission, as the factory-set keys do, changing the Soft Key settings actually sets the default for your fax machine. (These default settings can be changed, if necessary. They are not permanent.)

Setting the Soft Key

1 Press **MENU**, **[Mach Set]** and select **"D.Soft Key"**.

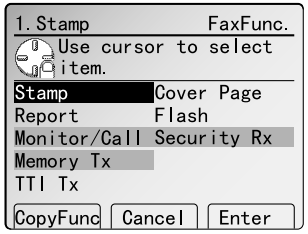
2 Press **[Enter]**.

The LCD shows the function name currently stored in the Soft Key 1.



Note: If you want to see the all four functions currently stored in the Soft Keys, press **[ShowAll]**. However, when you assign the other function in the Soft Key, you should press **[ShowAll]** again to select the Soft Key.

3 Press desired Soft Key (*1–4*) on the control panel you want to change. Then press **[Enter]**.



Note: On the LCD, the highlighted function is assigned to the Soft key currently select. The shaded function are assigned to other Soft key.

4 Select the function you want to assign to the Soft Key using the cursor key.

Note: If you want to assign a copier function, press **[CopyFunc]**.

5 Press **[Enter]** to save the setting.

6 If you want to set another Soft Key, go back to step 3.
If you *do not* want to set any more Soft Keys, press **[Exit]** or **RESET** to finish.

Now you can use the labels included in your machine's original packaging to label the Soft Key function you just set.

Macros

In order to complete some operations on your machine, you may have to follow several steps and press several different buttons. But programming your machine's *Macro keys* (**M1 – M6**) can reduce those many steps to a simple press of a key. You can "teach" the Macro keys to carry out any of the following jobs:

Note: One Macro key can hold only one job. It cannot combine two or more jobs.

Note: Macro key can hold not only faxing job, but also it can hold the copier job.

Copy:

- Copier settings (see page 2.12 on "Copy Reference").

Printouts:

- One-touch numbers list (pages 2.3)
- Speed-dial numbers list (pages 2.6)
- Programmable one-touch numbers list (pages 2.42)
- Delayed commands list (pages 2.11)
- Activity journal (pages 2.18)
- Call group directory (pages 2.7)
- Machine settings list (pages 3.9)
- Sample cover page (pages 2.21)
- Department time list (pages 2.50)
- Batch box list (pages 2.13)
- List of stored batch documents (pages 2.14)
- List of transfer pattern (pages 2.24)
- List of F-Code boxes (pages 2.32)
- List of documents stored in F-Code boxes (pages 2.32)
- Stored polling documents (pages 2.23)
- Delayed commands documents (pages 2.11)
- Security receive documents (pages 2.45)
- Batch transmission documents (pages 2.14)
- F-Code Box (bulletin box) documents (pages 2.33)

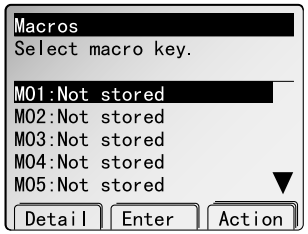
Document storage:

- Regular polling documents (pages 2.33)
- F-Code polling documents (pages 2.33)

Communications functions:

- Delayed transmission (explained on pages 2.10–2.11)
- Regular polling (page 2.22)
- Continuous polling (page 2.22)
- Batch transmission (pages 2.12–2.14)
- F-Code transmission (page 2.35)
- F-Code polling (pages 2.35–2.36)

Programming the Macro key



1 Press **MACRO PROGRAM**. The LCD shows Macro key list.

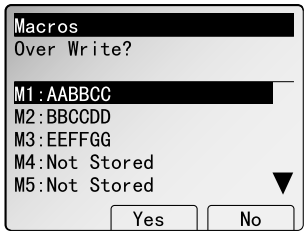
Note: The LCD can show the Macro name up to 19 characters. If you want to view the Macro name longer than 19 characters, press **[Detail]** after program it.

2 Select the Macro key (**M1 – M6**) you want to program or change.

If you want to overwrite only the Macro name, press **NEXT** twice, **[Chg.Titl]** and then go to step 9.

3 Press **[Enter]**.
If you chose the Macro key already programmed, proceed to step 4. Otherwise, skip to step 5.

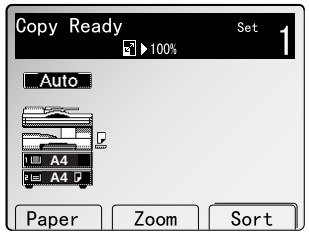
4 The LCD shows:



If you want to overwrite the operation already programmed, press **[Yes]**.

If you *do not* want to overwrite the key you have chosen, press **[No]** and go back to step 2.

5 The LCD of copy standby mode appears, which means the machine is ready to register the steps into the Macro key.



Note: It keeps beeping and blinking the **COPY** or **FAX** key during the job registration in order to make notice of the registration mode.

6 Press the keys exactly as you operate the job you want to program into the Macro key.

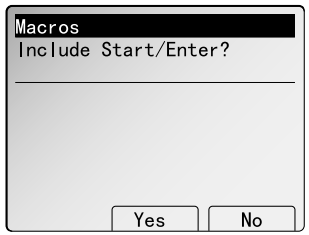
Note: If you want to program the fax function, first press **FAX**. Or, if you want to program the copier function, first press **COPY**.

Note: You can program up to 60 steps. When it comes over 60 steps, your fax machine asks if you register the operations you have entered. If you want to register them, press **[Yes]**. If not, press **[No]**.

Note: If you want to cancel the operations you have set, press **RESET** and then go back to step 1.

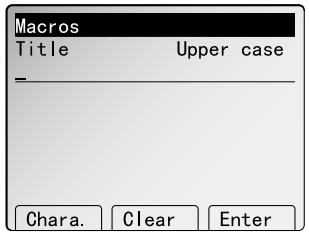
7 If you programmed **Start** or **[Enter]** into the operation, proceed to step 8. Otherwise, press **MACRO PROGRAM** and skip to step 9.

8 If you want to start immediately after pressing the Macro key when you use it, press **[Yes]**. If not, press **[No]**.



Note: If you want to confirm the settings or operations in the Macro key before the machine do it, press **[No]** here.

9 The machine now asks you to name this job. Enter the name of this job.
A job's name may be up to 130 characters in length.



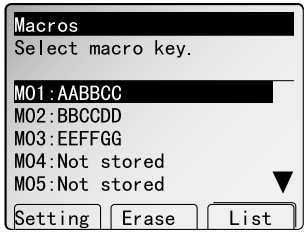
If you *do not* want to enter or change this job's name, skip to step 10.

10 Press **[Enter]** to save the setting.
The machine will return to standby mode.
To program or modify another job, repeat steps 1–10.

Erasing a Macro key

1 Press **MACRO PROGRAM, NEXT.**

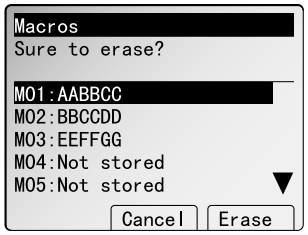
2 Select the Macro key (**M1 – M6**) you want to erase.



3 Press **[Erase]**. The LCD shows:

Note: If you want to quit without erasing the Macro key you've selected, press **[Cancel]**. The fax will return to step 2.

4 Press **[Erase]** again to erase the job.



To erase another Macro key, repeat steps 2–4. Or press **RESET** to return to standby mode.

Printing a list of your Macro keys

Your fax machine can print a list of the commands you've stored in your Macro keys.

The list includes:

(1) each key's Macro key number
(2) the name of the job stored in the Macro key

To print a list of Macro keys, press **MACRO PROGRAM, NEXT, [List]**.

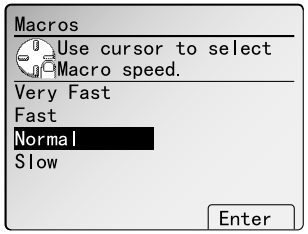
Setting the speed for Macros

You can adjust the speed of one step in the Macro key.

1 Press **MACRO PROGRAM, NEXT, [Setting]**.

2 Select desired speed for Macros using the cursor key.

3 Press **[Enter]** to save the setting.



Fax dialling with the Macro key

To dial a fax call using a Macro key:

1. Place the document and select resolution and contrast you require.
2. Press the **Macro key** in which you've stored the fax communication command.
3. Press **START**, if you have not registered **START** in the Macro key.
4. The programmed command will start.

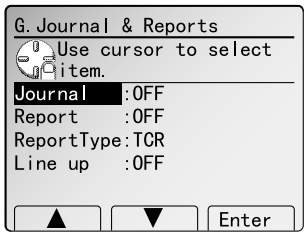
Setting the activity journal

Just as a checkbook records your daily financial transactions, your fax machine keeps an *activity journal* which records its 100 most recent fax transactions. The activity journal lists the following information for each transaction:

- *Assigned number*, starting each day at *001*
- *Remote location* called
- *Resolution mode*
- *Starting date and time*
- *Duration*, in minutes and seconds
- *Length*, in number of pages
- *Department code* (see pages 2.49–2.50)
- *Result* of the call — If preceded by an asterisk (*****), this signifies an ECM communication (see page 3.1)
- *Any special operations* — For example, a fax call made using an optional handset will appear as "Manual"

Your fax machine will print the activity journal automatically after 100 transactions. To toggle this automatic printing on or off:

1. Press **MENU, G, [Enter].** The LCD shows (see right):
2. Select **"Journal"** and then press **[Enter]**.
3. Select **"ON"** and then press **[Enter]** to save the setting.



Printing an activity journal manually

To print an activity journal *immediately* without waiting for 100 transmissions to be completed, press **MENU, G, [Report]**.

Setting the printing order of the activity journal

Your fax machine prints the activity journal for every fax transaction. For example, if your machine has to redial a call, it will list those redials on the journal.

If you want to list those activities in the order of their assigned numbers, you can change the printing order of the activity journal.

To change the printing order:

1. Press **MENU, G, [Enter]** and then select **"Line Up"** then press **[Enter]**.
2. Select **"ON"** and then press **[Enter]**.

Setting the reports: TCRs and RCRs

Your fax machine can print *reports* of transmissions and receptions.

There are two different reports: a *transmit confirmation report (TCR)* and a *receive confirmation report* (RCR). You can receive a TCR after sending a fax to *any* Group 3 fax machine, but the RCR function works only when you send a fax to a compatible Muratec machine. (Consult your authorized Muratec dealer with any questions about such compatibility.) Choose the type of report you want, based on the fax machines to which you're transmitting.

What the reports tell you

TCR

The TCR lists the following information for each communication:

- *Date and time* of the TCR's printout
- *Remote location* called
- *Resolution mode*
- *Starting date and time*
- *Duration,* in minutes and seconds
- *Length,* in number of pages
- *Result* of the call
- *Any special operations* — For example, a fax call made using an optional handset will appear as "Manual"
- *Sample of the document* — An image of the first page of the document

If an error occurs, the TCR tells you the remote location which was called, the *error code* and *error message* (see pages 4.1–4.5).

RCR

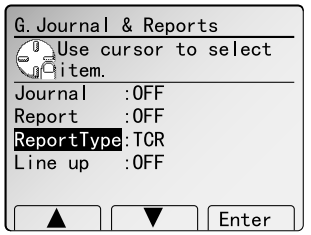
The RCR lists the following information for each communication:

- *Date and time*
- *Remote location* called
- *Assigned number,* starting each day at *001*
- *Resolution mode*
- *Duration,* in minutes and seconds
- *Length,* in number of pages
- *Result* of the call — Either "OK" or an *error code* (see pages 4.4–4.5)

To set the printing one of these reports:

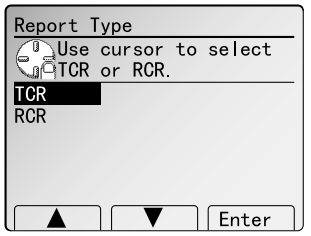
1 Press **MENU, G, [Enter]**.

2 Select **"ReportType"** then press **[Enter].**

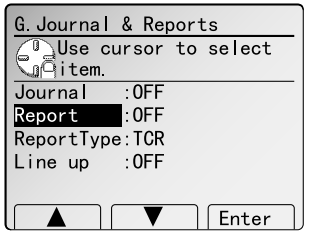


3 Select confirmation report type **"TCR"** or **"RCR"** by using the cursor key.

4 Press **[Enter]** to save the setting.

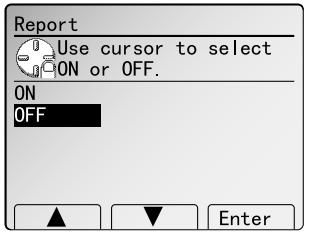


5 To print the selected report automatically after every fax you send, select **"Report",** and then press **[Enter]**.



6 Select **"ON"** using the cursor key.

7 Press **[Enter]** to save the setting.



To turn the confirmation report feature on or off for *only* the next fax transmission, press **REPORT.**

What happens next depends on the setting you chose:

- If the light next to the **REPORT** key glows, the fax machine will print the confirmation report automatically.
- If the light next to the **REPORT** key doesn't glow, the fax machine will not print a confirmation report.

After you send this transmission, your machine returns to the setting you chose in step 2, above.

Enlarge transmission

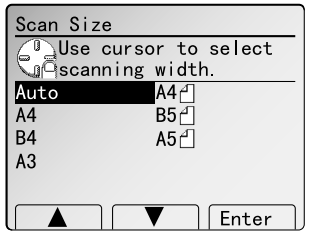
You can transmit your document with enlarging.

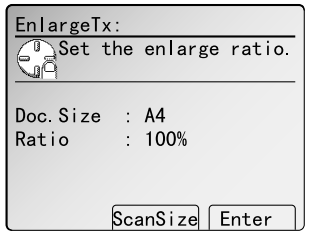
Note: You can select a preset enlargement ratio, or directly enter the ratio using the numeric keypad. Also, you can use cursor key to enter the ratio.

Note: You can enter the enlargement ratio from 100% through 400% in 1% steps.

Here's how:

1. Place the document and select resolution and contrast you require.
2. Enter **NEXT**, **[EnlrgeTx]**.
3. If you want to select area that will be enlarged, proceed to step 4.
   Otherwise, skip to step 5.
4. Press **[ScanSize]** then select scan size that will be enlarged.
   Then press **[Enter]**.
   Note: Refer to "Select scanning area to be sent," page 1.7.
5. Enter enlargement ratio.
   You can use the **REDUCE/ENLARGE** key, ▲ or ▼ of the cursor key or numeric keypad to enter enlargement ratio.
6. Press **[Enter]**.
7. Enter the fax number and press **START**.





Fax & Copy

With the Fax & Copy feature turned on, your machine asks if you want to make a copy of a document each time it transmits that document from memory.

Note: The Fax & Copy function cannot be used for non memory transmissions.

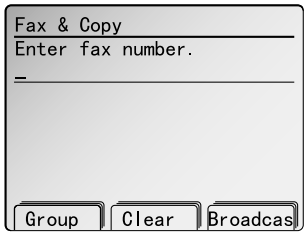
Note: Quick Memory transmission (see page 3.2) and the Fax & Copy function cannot be used at the same time. If both are turned on, Quick Memory will not work.

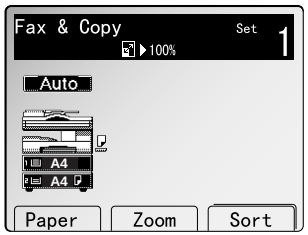
Note: When using the Fax & Copy feature, the Image rotate transmission feature (see page 3.3) will not work.

Note: The Fax & Copy feature will use the same resolution you set for the transmission for the copy's scanning resolution.

Using the Fax & Copy function

1. Place the document and select resolution and contrast you require.
   Note: With this function, you cannot select Normal and Halftone resolution.
2. Enter **MENU** and select **"Fax & Copy"**.
3. Press **[Enter]**.
4. Enter the fax number. Either press a one-touch key, enter a speed-dial number, call group number or use the numeric keypad to enter the fax number.
   If you entered the fax number using a one-touch key, skip to step 6.
   Otherwise, go on to step 5.
5. Press **START.**
6. The LCD changes copy mode and asks the number of copies you want to make:
7. Use the numeric keypad to enter the number of copies you want for each page in the document. Choose from 01 to 99 copies.
   Note: If you want to quit without transmitting and copying the document, press **STOP**. The fax returns to standby mode.
8. Press **START** to begin the transmission and copying process.





Cover page

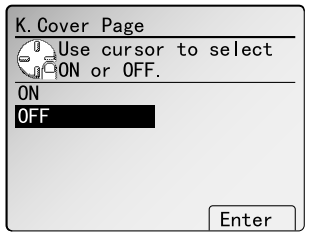
Your fax machine can store a *cover page* to send at the beginning of each outgoing fax. This page includes the current date and time, your Location ID and your fax number (as stored in the TTI) and a message of up to 40 characters in length. The information appears in a box similar to this:

```
Fax Message From:

      4 Nov 2000    14:00

Name:       AABBCC Co.
Fax Number: 123-4567

[We appreciate your business. Thank you!]
```

Turning the cover page on

1. Press **MENU, K, [Setting].**
2. To tell the fax machine it *should* send a cover page before each document you transmit, select **"ON"** by using the cursor key.

   Note: To tell the machine not to send a cover page, select **"OFF"** and press **[Enter]**.

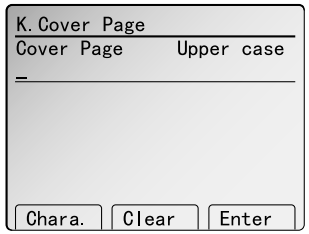


3. Press **[Enter]** to save the setting.

Now the cover page feature is working but your message line (shown in the example as "We appreciate your business. Thank you!") is blank. To enter that message, see "Entering the cover page message," below.

Entering the cover page message

1. Press **MENU, K, [Enter].**
2. Use the one-touch keypad to enter a message for the cover page. Enter the message the same way you entered your fax name during EasyStart. The message can be up to 40 characters in length.



   Note: If you want to erase characters, press **[Clear]** to erase to the left. If you want to change just one character in the number, move the cursor by using cursor key, and press **[Clear]** to erase it. Then re-enter the number correctly. Then re-enter the message correctly.

3. When the message appears as you want it, press **[Enter]** to save it.

Printing the cover page

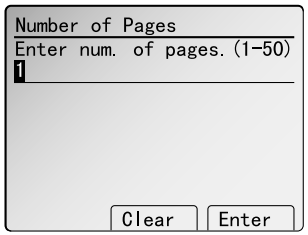
To confirm that the cover page is set correctly, print a sample cover page from your fax machine. Press **MENU, K, [List].**

Numbering pages

Just before sending a fax, you can tell the machine how many pages you will send. This function confirms if the machine scanned all pages of your documents.

To set up page numbering:

1. Count the number of pages in your document.
2. Set your document in ADF.
3. Adjust the resolution and contrast, if necessary.
4. Press **NEXT** until **[#OfPages]** is appeared.
5. Press **[#OfPages]**.
6. Use the numeric keypad to enter the number of pages in your document.
7. Press **[Enter]**.



From here, continue sending the document using whatever type of transmission you need (broadcast, group dial, etc.). The machine counts number of your documents when it scans your documents. If the number you have entered and the number the machine counted did not match, the machine will beep and tell you to reset your documents.

Polling

Polling allows someone to fax a document to you *without* having to make the call or pay for it. There are several kinds of polling:

- Regular polling — Your fax retrieves a document from a remote fax machine.
- F-Code polling — Your fax retrieves a document stored as a file in the remote fax machine. To do this, you must be communicating with another F-code-compatible fax machine. For more information on F-Code polling, see "F-Code communication," pages 2.35–2.36.
- Continuous polling — Your fax continuously retrieves a document from any remote fax machine at a designated time. For example, a hospital pharmacy can use this to check on orders waiting in fax machines throughout the hospital.

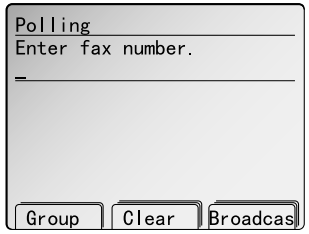
For polling to work, the remote machine must also be set up to *be polled*. See the remote machine's operating instructions, if necessary.

Regular polling

To set up your machine for regular polling:

1 Make sure the document is inserted in the *remote* fax machine.

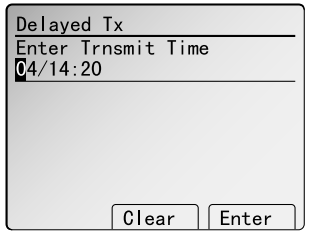
2 Press **MENU** and select **"Polling"** then press **[Enter]**. The LCD shows (see right):



3 Enter the remote fax machine's number by either pressing a one-touch key, entering a speed-dial number or using the numeric keypad.

4 To perform the regular polling *now*, skip to step 8.
To perform *delayed* regular polling, go on to step 5.

5 Press **MENU** and select **"Delayed Tx"** then press **[Enter]**. The LCD shows (see right):



6 Use the numeric keypad to enter the date and time (use the *24-hour format*) when your machine should perform the delayed regular polling.

7 Press **[Enter]**.

8 Press **START.**

When your machine polls for documents, it dials the number and, upon making contact with the other machine, begins receiving the document as if the other machine had placed the call.

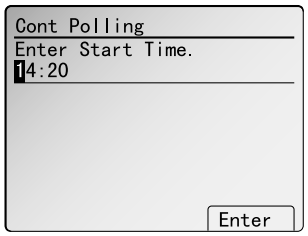
Continuous polling

To set up your machine for continuous polling:

1 Press **MENU,** select **"Cont Polling"** and then press **[Enter].**

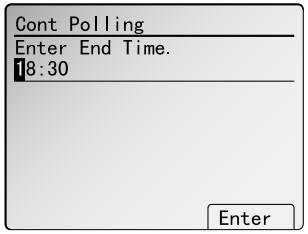
2 The LCD shows the current time:
Use the numeric keypad to enter the time your machine should *begin* the continuous polling. (Use the *24-hour format*.)

3 When the start time is set, press **[Enter]** to save it.



4 Use the numeric keypad to enter the time when your machine should *finish* the continuous polling. (Use the *24-hour format*.)

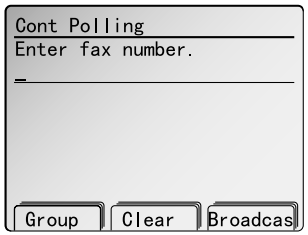
Note: If you set the end time *earlier* than the start time, the polling operation will continue until the selected end time *tomorrow*.



5 When the end time is set, press **[Enter]** to save it.

6 Enter the remote fax machine's number by either pressing a one-touch key, entering a speed-dial number or using the numeric keypad.

If you are entering only one number for continuous polling, skip to step 8.
To add additional fax numbers for this operation, go on to step 7.



7 To add additional fax numbers, press **[Broadcas]** between each one to insert a *comma* then enter the number as in step 2. You can specify up to 30 numbers (and/or call groups) for continuous polling.

Important: Do **not** insert a comma after the last fax number.

Note: If you enter characters by mistake, press **[Clear]** to erase them. Or press ▲ or ▼ of the cursor key to select the number then press **[Clear]**.

8 Press **[Enter]** to save the number.

9 Press **START.**

When your machine polls for documents, it dials each number and, upon making contact with the other machine, begins receiving the document as if the other machine had placed the call. It will continue the process throughout the time period you selected in steps 2–5.

Note: When you want to end a continuous polling operation, you must delete it using the Review Commands feature (see page 2.11).

Being polled

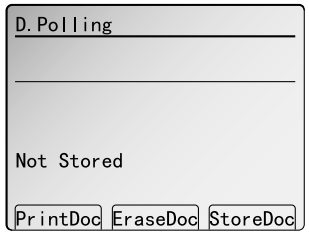
Not only can you poll, but you can also *be* polled. To set up a document for regular polling:

1 If your machine is set for Tel Ready reception, change the reception mode to other mode. Your machine **can't** be polled if it's in Tel Ready mode.

2 Insert the document.

3 Adjust resolution and contrast if necessary. (Your fax machine will be transmitting to the machine doing the polling.)

4 Press **MENU, D, [Enter], [StoreDoc].**
Your fax will scan the document into memory and return to standby mode.



Once the remote fax machine polls the document you stored, your fax machine automatically erases the document from memory.

Printing a stored polling document

To print a document you've stored for regular polling *without erasing* it, press **MENU, D, [Enter], [PrintDoc].**

Erasing a stored polling document

To erase a document you've stored for regular polling from your machine's memory, press **MENU, D, [Enter], [EraseDoc], [EraseDoc].**

Limiting polling access to your fax machine

Your machine's *closed network* setting (see page 2.48) works for polling, also. If a calling fax doesn't "present" the proper passcode, it cannot poll from your fax.

Note: If you're using the Block Junk Fax feature (see pages 2.48–2.49), even incoming calls which meet the passcode test must come from phone numbers you've approved.

Transferring documents (Fax Forwarding)

This feature tells your fax machine to receive documents and then transfer them automatically to another fax machine. You can set the time period for which the fax machine will continue this process.

Note: Fax forwarding will not transfer these types of received documents:

- SecureMail reception
- Polling reception
- Relay broadcast reception
- F-Code reception

Create the transfer pattern

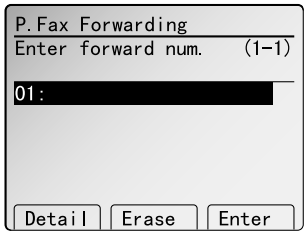
Note: You can create up to *five* transfer patterns.

To set up transfer pattern:

1 Press **MENU, P, [Enter]**.

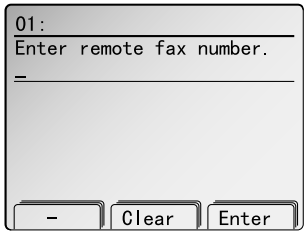
2 If you set up a transfer pattern at your first time, skip to step 4.
If you have already set up any transfer pattern, proceed to step 3.

3 Select the number you want to set up or change.



4 Press **[Enter]**. The LCD shows (see right):

5 Enter the fax number for the remote fax to which you want documents to be transferred. Use either a one-touch number, a speed-dial number, a call group or regular number dialled from the numeric keypad.



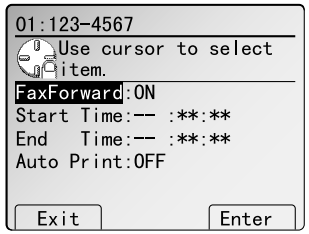
If you are entering only one number for transferring, skip to step 7.
To add any additional fax numbers for this operation, proceed to step 6.

6 To add more fax numbers, press **[Broadcas]** between each one to insert a comma, then enter the number as described in step 3. If **[Broadcas]** is not appeared on the LCD, press **NEXT** until it appears.
You can specify up to 301 numbers for transferring.

Note: You can enter only 1 location by using numeric keypad.

Note: If you enter characters by mistake, press **[Clear]** to clear them. If you want to erase an existing entry numbers, press ▲ or ▼ of the cursor key to select the number then press **[Clear]**.

7 Press **[Enter]** to save the setting. The LCD will show:

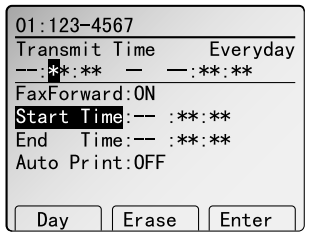


8 Select **"Fax Forward"** and then press **[Enter]**.

9 Select **"ON"** or **"OFF"** then press **[Enter]** to save the setting.

10 Select **"Start Time"** and then press **[Enter]**.

11 Enter the day and time. The machine asks time period that the machine will transfer documents.



How to enter the day and time:

- To enter the day, press **[Day].**
- To enter the time, using numeric keypad.
- If you do not wish to set up the day and time, enter **[Erase]**.

Note: To change only one digit, move the cursor by using the cursor key to that digit. Then, overwrite the correct digit.

12 Press **[Enter]** to save the setting.

13 Select **"Auto Print"** and then press **[Enter]**.

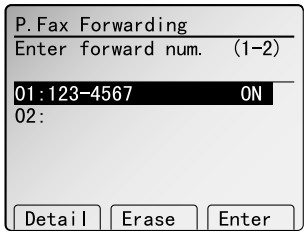
Automatic printing determines whether the machine will print a document automatically upon receiving it:

On: A copy of every document received and transferred is printed at your machine.

Off: Received and transferred documents are not printed at your machine.

Note: If the security reception (pages 2.44–2.45) is activating, the machine dose not print received document regardless of this setting.

14 Press **[Exit]** to save the setting.
The LCD shows forwarding number and setting On or Off you've entered.



15 To finish, press **RESET**.

Printing a list of your transfer patterns

You can easily print a list of your transfer patterns. The list includes each pattern's identifier number, remote fax's number where you want documents to be transferred, On/Off setting, time period and Auto print setting.

To print the list, press **MENU, P, [List].**

Audible alarm

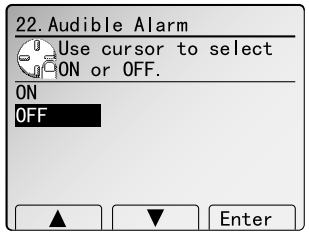
Whenever your fax machine receives a document from another fax machine, your machine will sound the alarm tone alerting the person for whom the document is intended.

Important: The alarm tone is sounding until either the person presses **STOP** or another document is received.

Note: Your machine does not sound the alarm during:

- Polling
- Call request
- F-Code polling reception
- Turning off this feature

To toggle this audible alarm feature on or off:



1. Press **MENU, J, 2, 2, [Enter]**.
2. If the setting you see is acceptable, skip to step 4. Otherwise, proceed to step 3.
3. Select desired setting by using the cursor key.
4. Press **[Enter]** to save the setting.

Call request

You can send or receive a fax message *and* have a regular phone conversation *on the same call* (although, not at the same time). This is called a *call request*. It doesn't matter whether you're sending the fax or receiving it. You may fax first and then talk, or talk first and then fax.

Important: For this feature to work, the remote fax machine must have a similar call-request capability. Your machine must also have an optional handset attached.

Note: Communicating this way disables "V.34" mode, causing the fax machine to handle the call in normal ITU-T Group 3 fashion. See page AI.1 for more information.

Faxing/receiving first, then talking

To send or receive a fax first and then talk:

1. While your fax machine is sending or receiving the fax, press **MONITOR/CALL.**
2. At the remote fax machine, the ringer will sound after that machine receives each page.
3. If someone answers at the remote fax machine, your fax machine will ring several times. If so, pick up the optional handset. In a few seconds, the line will open and you can begin your conversation.

Talking first, then *sending* a fax

To talk first and then send a fax:

1. When you've finished your phone conversation, *don't hang up.*
2. Insert the document you want to fax.
3. Adjust the resolution and contrast if necessary.
4. Tell the person at the other fax machine to press **START** and to hang up his/her handset. *Don't hang up **your** handset yet!*
5. When you hear fax tones, press **START** and hang up your fax machine's optional handset. Your fax machine will send the document.

Talking first, then *receiving* a fax

To talk first and then receive a fax:

1. When you've finished your phone conversation, *don't hang up.*

2 Tell the person at the other fax machine to press **START** and to hang up his/her handset. *Don't hang up your handset yet!*

3 When you hear fax tones, press **START** and hang up your machine's optional handset. Your machine will receive the document and print it out.

Responding to a call request

If someone requests a call *from* you during a fax communication, you'll hear a long ring after the receiving machine has received each page. To answer the call request:

1 Lift your machine's optional handset, and listen for a few seconds. You may hear a brief series of fax tones.

2 Shortly, the line will open and the person at the other end of the line will answer. You and the other person now can have a normal phone conversation.

The power of multi access

Your fax machine's *multi access* feature sharply reduces the time you might spend waiting for the machine to finish its work. Multi access is a more powerful version of what is already a pretty powerful feature, called *dual access*. While a fax with normal dual access allows you to do two things at once, multi access allows you to do *four* operations at once. *For example*, even if the machine is (1) printing a copy, (2) transmitting from memory and (3) scanning documents for a different memory transmission, you can still (4) program the machine.

F-Code communication

F-Code: an introduction

The ITU-T, the United Nations agency that standardizes international telecommunications, has created a fax industry standard for using sub-addressing and password-based communication. One name for this standard is F-Code, and that's what we'll call it in these instructions and on your machine's display.

How sub-addressing works

To help understand sub-addressing, think about how someone in a large company receives mail. For example, mail for the Accounting department is first delivered to the company's main mailroom. Then the mailroom routes the mail to Accounting.

That's the idea behind sub-addressing. Your fax and another F-Code-compatible fax exchange special signals to indicate just where the fax really should go. It's as if the sending fax is saying, "Deliver this to room 48," and the receiving fax does just that.

Your machine has up to 50 mailboxes for these special deliveries. When someone sends an F-Code fax to you, your machine receives it into one of those 50 mailboxes — whichever box the sender chooses.

Sending F-Code securely

For greater security, you can set up a password with each F-Code sub-address, which lets you use secure transmission, polling and relay broadcasting when communicating with any other F-Code compatible fax machine.

Guidelines for using F-Code

(1) To use ITU-T sub-addressing, you must create F-Code boxes in your machine

(2) Your machine holds up to 50 of these boxes

(3) Your machine stores up to 30 documents into each F-Code box (each document can include one or more pages)

Creating or modifying an F-Code box

Choosing the F-Code box type

Before you set up an F-Code box, first decide how your callers will use it — as a bulletin box, a security box or a relay box.

- **Bulletin box** — Stores documents that people in remote locations retrieve by *polling* the box. For example, your sales branches could call in at any time to get a printout of your latest prices that you've stored in a bulletin box.

  A bulletin box stores both scanned and retrieved documents, and it holds its contents indefinitely (as long as the unit has AC power).
- **Security box** — Receives and stores F-Code secure communications.
- **Relay box** — Receives documents, then relays them to other machines. The machine that relays the document is called a "hub". Your fax machine can either *send* to a hub or it can *be* a hub.

4 elements of an F-Code box

Each F-Code box has the following four elements:

(1) F-Code box number (*01-50*)

(2) F-Code box name (up to 16 characters)

(3) F-Code sub-address (up to 20 characters - can include numbers and the ***** and **#** characters only)

(4) I.D. Code (4 digits)

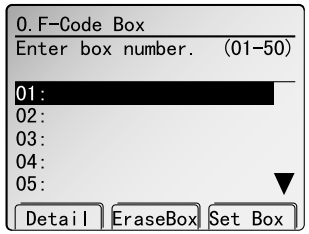
You will choose the information for each of these elements, and enter it into your machine. The following steps will walk you through entering and changing that information.

To create or modify an F-Code box:

1 Keep pen and paper with you as you follow these steps. As you decide on a sub-address and enter it into your machine, write it down. Remember to: **(1)** write down which box goes with which sub-address, **(2)** write down any passwords or I.D. codes you enter, **(3)** keep these printed records in a safe place.

2 Press **MENU**, **0** [the letter *O*, *not* a zero], **[Enter]**. The LCD shows the F-Code box list.

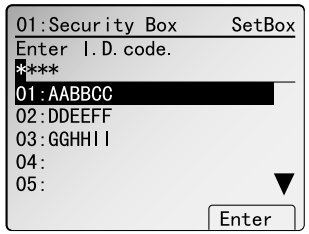
3 Select the F-Code box you want to create or modify using the cursor key.



Note: You can select the F-Code box by directly entering that two-digit identifier number (01-50).

Note: You can press **[Detail]** to see the number which has been programmed in that speed-dial number.

4 Press **[Set Box]**.
What you do next depends on whether you're creating or modifying the F-Code box:
If creating — skip to step 6.
If modifying — the LCD asks you to enter the proper I.D. code. The LCD shows (see right):

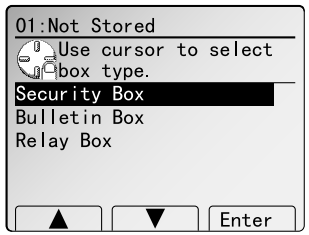


5 Use the numeric keypad to enter the 4-digit I.D. code (not the ITU-T sub-address and not the ITU-T password) and then press **[Enter]**.

- If you modifying the *Security box*, go to step 7.
- If you modifying the *Bulletin box*, skip to step 16.
- If you modifying the *Relay box*, skip to step 28.

Note: You cannot change the *type* of an existing F-Code box. If you're modifying an existing F-Code box and want to change the box *type*, you first must erase the old box, then create a new one.

6 The fax machine is asking which box type you want to assign to this box — *bulletin*, *security* or *relay*.

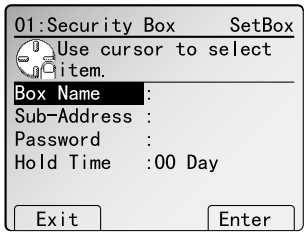


Select desired box type using the cursor key and then press **[Enter]**.

- If you chose *Security*, go to step 7.
- If you chose *Bulletin*, skip to step 16.
- If you chose *Relay*, skip to step 28.

If you chose Security:

7 The security box has the following settings:



- **Box Name** – You can enter the name for this F-Code box.
- **ITU-T sub-adrress** – This is the numerical identifier you must enter in order to communicate with any remote F-Code compatible fax.
- **ITU-T password** – This is the password for ITU-T-compatible F-Code fax transactions. You don't need to have a password for the F-Code box. However, using a password will make your F-Code communication much more secure.
- **Hold time** – This setting is how long you want to keep a document stored in your machine's F-Code box.
- **I.D. code for this F-Code box** – This is the four-digit I.D. code for the box's security, which you use to **(1)** print a document any remote F-Code-compatible fax sends to this F-Code box or **(2)** you enter before you can make any changes to this F-Code box. (See step 12.)

8 To enter the *Box name*:

Select **"Box Name"** using the cursor key, and then press **[Enter]**.

Then, enter the name the same way you entered your fax name during EasyStart. An F-Code box's name can be up to 16 characters in length.

Note: To erase characters, press **[Clear]** to erase to the left.
To change just one character in the name, move the cursor to that character and then press **[Clear]** to erase it. Then re-enter the name correctly.

Press **[Enter]** to save the box's name and continue.

9 To enter the *ITU-T sub-address*:

Select **"Sub-Address"** using the cursor key, and then press **[Enter]**.

Then, use the numeric keypad to enter this box's ITU-T sub-address to identify this F-Code box.
The sub-address can be up to 20 characters in length and include any combination of numbers and the * and # characters (but no other non-numeric characters).

Note: No other F-Code box in this machine can have the same sub-address as the one you enter here.

Note: To erase characters, press **[Clear]** to erase to the left. To change just one character in the name, move the cursor to that character and then press **[Clear]** to erase it. Then re-enter the name correctly.

Press **[Enter]** to save the ITU-T sub-address and continue.

10 To enter the *ITU-T password*:

Select **"Password"** using the cursor key, and then press **[Enter]**.

Then, use the numeric keypad to enter this box's ITU-T-compatible password. This password can be up to 20 characters in length and include any combination of numbers and the * and # characters (but no other non-numerical characters).

Note: To erase characters, press **[Clear]** to erase to the left. To change just one character in the name, move the cursor to that character and then press **[Clear]** to erase it. Then re-enter the name correctly.

Press **[Enter]** to save the ITU-T password and continue.

11 To enter the *Hold time*:

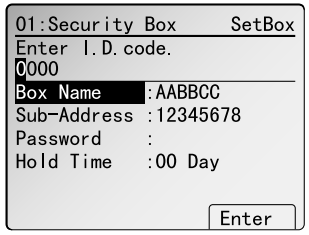
Select **"Hold Time"** using the cursor key, and then press **[Enter]**.

Then, use the numeric keypad to enter a two-digit number indicating how many days (00-31), you want your fax machine to keep received documents in this F-Code box.

Note: Your fax machine can store incoming documents in F-Code boxes (up to 30 documents) as long as 31 days, after which it automatically erases the documents. But if your machine has plenty of memory, you may want to override the 31-day limit in order to keep the documents indefinitely. If so, enter *00*. If you choose this, you will have to delete documents manually. (You may want to contact your authorized Muratec dealer regarding optional memory expansion.)

Press **[Enter]** to save the sub-address and continue.

12 Press **[Exit]**.
The machine asks for your F-Code box's four-digit security I.D. code. This is the I.D. code for the box's security, which you use to **(1)** print a document any remote F-Code-compatible fax sends to this F-Code box or **(2)** you enter before you can make any changes to this F-Code box.



13 Decide on a four-digit I.D. code (*0001-9999*) for this F-Code box. **Write it down**, and put it in a safe place.

Important: Do not use *0000* as an I.D. code.

14 Use the numeric keypad to enter the four-digit I.D. code for this F-Code box.

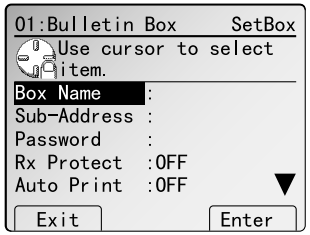
Important: After completing this step, you must know this code to print documents sent to this F-Code box. Be sure to write it down.

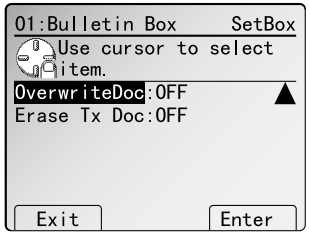
15 Press **ENTER** to save the F-Code box information.

To create or modify another F-Code box, go back to step 3.
To finish, press **RESET**.

If you chose Bulletin:

16 The bulletin box has the following settings:





- **Box Name** – Same as in step 7.
- **ITU-T sub-adrress** – Same as in step 7.
- **ITU-T password** – Same as in step 7.
- **Rx Protect** — *Reception protection*("Rx Protect" on the LCD) tells this box if it's okay to receive documents from remote locations. Callers can then poll these documents.
- **Auto Print** — *Automatic printing of received documents* ("Auto Print") tells the fax machine if it should print a document automatically upon receiving it into this box.
- **Overwrite Doc** — *Overwriting documents* ("Overwrite Doc.") tells your machine if it should overwrite (erase) existing documents when it receives a new one.
- **Erase Tx Doc** — *Erasure of transmitted documents* ("Erase Tx Doc.") tells your machine if it should erase a document from the box after a caller retrieves (polls) the document.
- **I.D. code for this F-Code box** – This is the four-digit I.D. code for the box's security, which you use to **(1)** print a document any remote F-Code-compatible fax sends to this F-Code box or **(2)** you enter before you can make any changes to this F-Code box. (See step 24.)

17 To enter the *Box name*:

This is same procedure in step 8. Please refer to step 8.

18 To enter the *ITU-T sub-address*:

This is same procedure in step 9. Please refer to step 9.

19 To enter the *ITU-T password*:

This is same procedure in step 10. Please refer to step 10.

20 To set the *Rx Protect*:

Select **"Rx Protect"** using the cursor key, and then press **[Enter]**.

Then, select desired setting "On" or "Off".

On: Do not open this box to receive documents from callers.
Off: Open this box to receive documents from callers.

Press **[Enter]** to save the box's name and continue.

21 To set the *Auto Print*:

Note: This setting is available only when the reception protection (*Rx protect*) setting is set to *off* (see step 20).

Select **"Auto Print"** using the cursor key, and then press **[Enter]**.

Then, select desired setting "On" or "Off".

On: Print the document automatically when the box receives it.

Off: Print the document manually, when you want to print it.

Press **[Enter]** to save the box's name and continue.

22 To set the *Overwrite Doc*:

Note: This setting is available only when the reception protection (*Rx protect*) setting is set to *off* (see step 20).

Select **"Overwrite Doc"** using the cursor key, and then press **[Enter]**.

Then, select desired setting "On" or "Off".

On: When your machine receives a new document into this box, it will erase any documents currently stored in it.

Off: When your machine receives a new document into this box, it *will not* erase the documents stored in it. Your machine can store up to 30 *documents* (each document can include one or more pages) in each box.

Press **[Enter]** to save the box's name and continue.

23 To set the *Erase Tx Doc*:

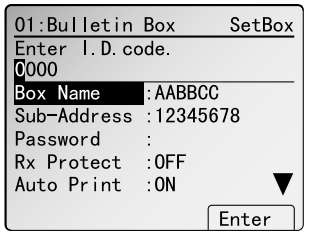
Select **"Erase Tx Doc"** using the cursor key, and then press **[Enter]**.

Then, select desired setting "On" or "Off".

On: Your machine erases the document from the box as soon as it sends it. If you choose "On", this box can be polled only once per document.

Off: Your machine does not erase a document from the box when it's polled. As long as your machine holds AC power and you do not erase the document from the box, the document is available indefinitely for polling.

24 Press **[Exit]**.
The machine asks for your F-Code box's four-digit security I.D. code. This is the I.D. code for the box's security, which you use to **(1)** print a document any remote F-Code-compatible fax sends to this F-Code box or **(2)** you enter before you can make any changes to this F-Code box.



25 Decide on a four-digit I.D. code (*0001-9999*) for this F-Code box.
Write it down, and put it in a safe place.

Important: Do not use *0000* as an I.D. code.

26 Use the numeric keypad to enter the four-digit I.D. code for this F-Code box.

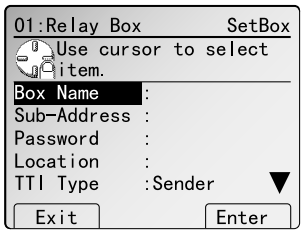
Important: After completing this step, you must know this code to access this F-Code box. Be sure to write it down.

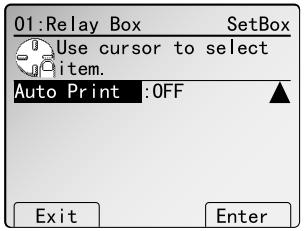
27 Press **ENTER** to save the F-Code box information.

To create or modify another F-Code box, go back to step 3.
To finish, press **RESET**.

If you chose Relay:

28 The bulletin box has the following settings:





- **Box Name** – Same as in step 7.
- **ITU-T sub-adrress** – Same as in step 7.
- **ITU-T password** – Same as in step 7.
- **Location** – You must enter the fax number of the remote unit. When your machine received document into the relay box, it dials to this number to relay the received document.
- **TTI Type** – You can select the type of TTI you want to appear on the faxes that are relayed to other callers.
- **Auto Print** – You can set your machine to print the received document received into the relay box.
- **I.D. code for this F-Code box** – This is the four-digit I.D. code for the box's security, which you use to enter before you can make any changes to this F-Code box. (See step 35.)

29 To enter the *Box name*:

This is same procedure in step 8. Please refer to step 8.

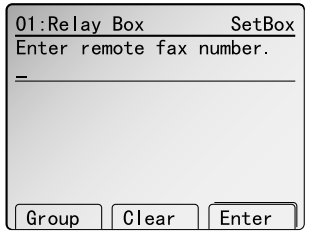
30 To enter the *ITU-T sub-address*:

This is same procedure in step 9. Please refer to step 9.

31 To enter the *ITU-T password*:

This is same procedure in step 10. Please refer to step 10.

32 To enter the *Location*:



Select **"Location"** using the cursor key, and then press **[Enter]**.

Then, enter the fax number using a one-touch key, a speed-dial number or a call group number. You cannot use the numeric keypad to enter these numbers.

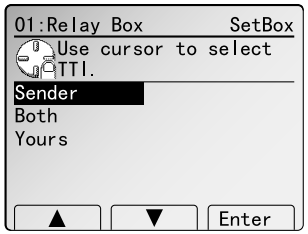
To add each fax number, press **[Broadcas]** between each one to insert a *comma*, then enter the number. You can specify up to 300 numbers for a remote unit.

Press **[Enter]** to save the box's name and continue.

33 To set the *TTI Type*:

Select **"TTI Type"** using the cursor key, and then press **[Enter]**.

Then, select the type of TTI you want to appear on the faxes that are relayed to other callers.



- **Sender** — Relay the document with hub unit's TTI (*don't* send your TTI).
- **Both** — Relay the document with both the hub unit's TTI and your TTI.
- **Yours** — Relay the document with your TTI instead of the hub unit's.

Press **[Enter]** to save the box's name and continue.

34 To set the *Auto Print*:

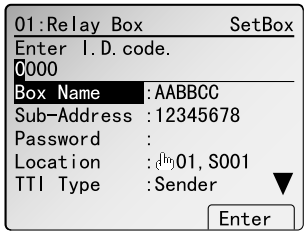
Select **"Auto Print"** using the cursor key, and then press **[Enter]**.

Then, select desired setting "On" or "Off".

On: Print the document automatically when it's received.
Off: The machine does not print it, but only relays it to the other machine.

Press **[Enter]** to save the box's name and continue.

35 Press **[Exit]**.
The machine asks for your F-Code box's four-digit security I.D. code. This is the I.D. code for the box's security, which you use to enter before you can make any changes to this F-Code box.



36 Decide on a four-digit I.D. code (*0001*-*9999*) for this F-Code box.
Write it down, and put it in a safe place.

Important: Do not use *0000* as an I.D. code.

37 Use the numeric keypad to enter the four-digit I.D. code for this F-Code box.

Important: After completing this step, you must know this code to access this F-Code box. Be sure to write it down.

38 Press **ENTER** to save the F-Code box information.

To create or modify another F-Code box, go back to step 3.
To finish, press **RESET**.

Printing a list of F-Code boxes

The list of F-Code boxes includes:

(1) Each box's identifier number
(2) Box name (if any)
(3) Sub-address
(4) Password
(5) Box type
(6) Each box's settings

To print a list of your F-Code boxes, press **MENU**, **0** [the letter *O, not* a zero], **[BoxList]**.

Printing a list of documents stored in your F-Code boxes

The list of documents stored in your machine's F-Code boxes includes:

(1) Each box's identifier number
(2) Box name (if any)
(3) Box type
(4) Each file number (or document number) that is stored

To print a list of documents stored in F-Code boxes, press **MENU**, **0** [the letter *O, not* a zero], **[Doc.List]**.

Using a security box

Printing a document you receive

When your fax machine receives a document via ITU-T sub-addressing to an F-Code security box, your machine prints a message to let you know.

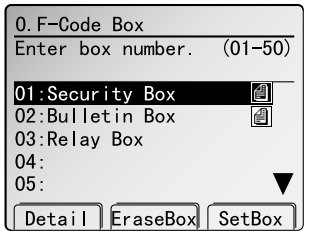
The message lists:
(1) the F-Code box number that received the document
(2) the Box name
(3) the remote machine's TTI (if any)
(4) the file numbers stored in the F-Code box.

You then have a certain number of days (see step 11 on page 2.29) in which to print out the document before your machine automatically erases it.

Note: For this operation to work, two things must be true:

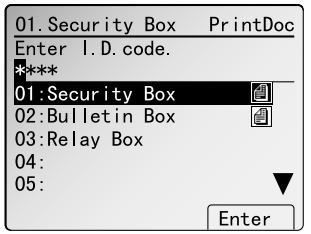
- You must know the F-Code security box's two-digit number.
- You must know the F-Code security box's four-digit I.D. code.

To print a received message:



1. Press **MENU**, **0** [the letter *O, not* a zero], **[Enter].** The LCD shows F-Code list.
2. Select the F-Code security box that holds the documents you want to print.

   Note: If the F-Code security box is storing any documents, the symbol is appeared on the LCD.
3. Press **NEXT**, **[PrintDoc]**.
   The machine prompts you to enter I.D. code.



4. Use the numeric keypad to enter your F-Code box's four-digit I.D. code.
5. Press **[Enter]**.
   If you've entered the correct I.D. code, your fax machine prints all documents in the F-Code security box and then erases them.

Using a bulletin box

Storing a document

Your fax machine can store up to 30 *documents* in each bulletin box.

Note: For this operation to work, two things must be true:

- The bulletin box must exist on your fax machine.
- You must know the bulletin box's two-digit number (*01-50*) and four-digit I.D. code. (See "Creating or Modifying an F-Code box," pages 2.27–2.31, if necessary.)

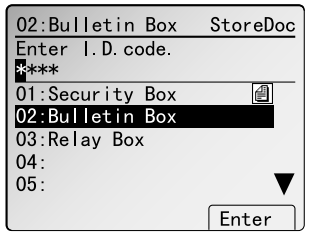
To store a document in a bulletin box for polling.

1 Place the document and make any necessary adjustments.

2 Press **MENU**, **0** [the letter *O*, *not* a zero], **[Enter].** The LCD shows the F-Code list.

3 Select the F-Code bulletin box where you want to store the document.

4 Press **NEXT**, **[StoreDoc]**.
The machine prompts you to enter I.D code.



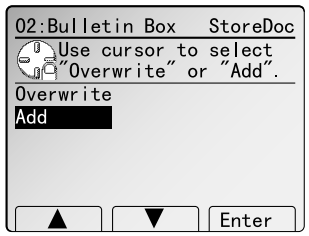
5 Use the numeric keypad to enter the four-digit I.D. code

6 Press **[Enter]**.
If you've entered the correct I.D. code, the display shows (see right):

Select **"Overwrite"** or **"Add"**.

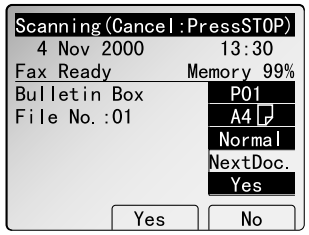
Overwrite: Your bulletin box erases the currently stored document when a new document is stored in it

Add: Your bulletin box keeps both the currently stored document and the new document, up to 30 documents in each box.



7 Press **[Enter]** to save the setting. Your machine starts scanning the document into the selected bulletin box:

Note: The file number (shown above as *1*) tells you how many documents are in this bulletin box. Your machine numbers files *1-30*. You need to know the file's number to erase or print it.



Printing a document stored in a bulletin box

You can print a document stored in your machine's F-Code bulletin boxes without erasing the document from memory.

To print a stored document:

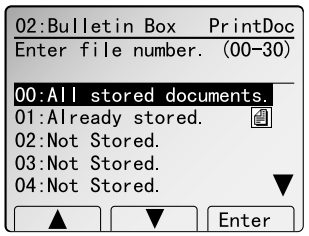
1 Press **MENU**, **0** [the letter *O*, *not* a zero], **[Enter].**
The LCD shows the F-Code list.

2 Select the F-Code bulletin box where you want to store the document.

3 Press **NEXT**, **[PrintDoc]**.
The machine prompts you to enter I.D code.

4 Use the numeric keypad to enter the four-digit I.D. code

5 Press **[Enter]**.
If you've entered the correct I.D. code, the display shows (see right):



6 Select the file number (*01-30*) of the document you want to print. If you want to print the all documents in this bulletin box, select file number "00".

7 Press **[Enter]**.
Your fax machine prints the chosen document(s), then returns to standby mode.

Erasing a document stored in a bulletin box

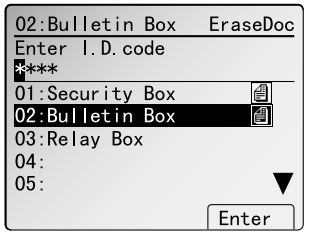
To erase a stored document:

1 Press **MENU**, **0** [the letter *O*, *not* a zero], **[Enter].**
The LCD shows the F-Code list.

2 Select the F-Code box where you want to store the document.

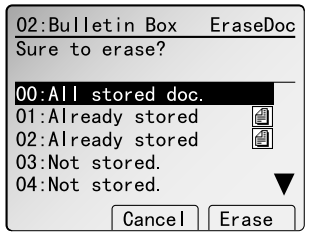
3 Press **NEXT**, **[EraseDoc]**.
The machine prompts you to enter I.D code.

4 Use the numeric keypad to enter the four-digit I.D. code, and then press **[Enter]**.



5 Select the file number (*01-30*) of the document you want to erase.
If you want to erase the all documents in this bulletin box, select file number "00".

6 Press **[Enter]**.
The LCD shows (see right):



Important: If you want to quit without erasing the document you've selected, press **[Cancel].** The fax will return to step 2.

7 Press **[Erase]** to erase the document(s) and the machine will return to step 2.

If you want to erase other document, repeat steps 2–7.

To return to the standby mode, press **RESET**.

Using a relay box

Once your fax machine receives a document via ITU-T sub-addressing to one of its F-Code relay boxes, it sends it to the other fax machines that you've set up on your relay box. (See "Creating or Modifying an F-Code box", page 2.27–2.31.)

If you set the Auto print mode to *on* when you created the relay box, your machine will *print* the received document, then relay it to the other machine. Otherwise, your machine will *only relay* it to the other machines, not print it. See "If you chose Relay," page 2.31 for more details on this setting.

Also, you can send (*relay broadcast initiation*) the document to another hub machine's F-Code box and get that machine to relay it to others. See "F-Code transmission" on page 2.35 for more detail.

The hub performs a *relay broadcast*, and the machine which sends the original document to the hub has performed a *relay broadcast initiation*.

Erasing an empty F-Code box

An F-Code box must be empty in order to erase it. (If you select an F-Code box in these steps which is not empty, the machine beeps. If this happens, print all documents in that box before erasing it.)

To erase an empty F-Code box:

1 Press **MENU, 0** [the letter *O, not* a zero]**, [Enter].**

2 Select the F-Code box you want to erase.

3 Press **[EraseBox].** If the F-Code box is empty, the machine prompts you to enter I.D. code.

4 Use the numeric keypad to enter your F-Code box's four-digit I.D. code.

5 Press **[Enter]**.
The LCD shows (see right):

Note: If you want to quit without erasing the F-Code box you've selected, press **[Cancel]**. The machine will return to step 2.

Note: If you want to quit without erasing *any* F-Code box, press **RESET**. The machine returns to standby mode.

6 Press **[Erase]** to erase the document(s) and the machine will return to step 2.

If you want to erase other F-Code box, repeat steps 2–6.

To return to the standby mode, press **RESET**.

F-Code transmission and polling

With F-Code, your machine can send secure transmissions, perform relay broadcast initiations and even poll from other ITU-T-equipped machines, regardless of manufacturer.
You can do this two ways:

- Using the programmable one-touch key (see pages 2.40–2.42)
- Entering the ITU-T sub-address and password directly, which is what we'll describe here.

Note: For F-Code communication to work, three things must be true:

- The remote fax machine must support ITU-T sub-addressing
- The remote fax must have a mailbox with an ITU-T sub-address created on it
- You must know the ITU-T sub-address and password (if any) for the remote machine's mailbox

F-Code transmission

1 Place the document and select the resolution and contrast you require.

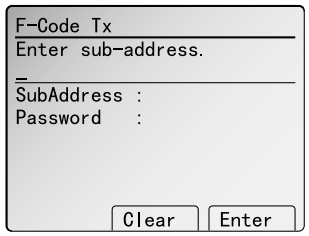
2 If you want to toggle between manual transmission and memory transmission, press **MEMORY TRANSMIT**.

3 Press **MENU** and select **"F-Code Tx".**

4 Press **[Enter]**.

5 Use the numeric keypad to enter the appropriate sub-address in the remote machine.

Note: If you make a mistake, press **[Clear]** to erase the character, then enter the correct number.



6 Press **[Enter]**.

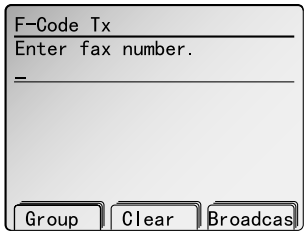
7 Use the numeric keypad to enter the password.

Note: If this sub-address does not have a password, skip to step 8.

8 Press **[Enter]**.

9 Enter the fax number either by pressing a one-touch key, entering a speed-dial number or dialling from the numeric keypad.

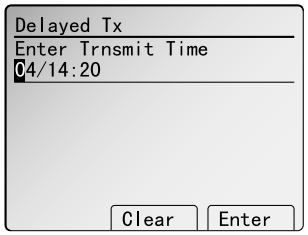
Important: Do ***not*** press **START,** if you want to delay this transmission.



10 What you do now depends on when you want the transmission to begin.

- To have it begin *now*, skip to step 13.
- To delay it, go on to step 11.

11 Press **MENU**, select **"Delayed Tx"** and then press **[Enter]**.
The LCD shows (see right):



12 Use the numeric keypad to enter the day and time when the transmission should begin, then press **[Enter]**.

13 Press **START**.

If in step 10 you chose an immediate transmission, your fax machine begins dialling. If you chose a delayed command, the machine shows "Reserved" on the LCD, indicating that it has stored the command in memory and will complete it later.

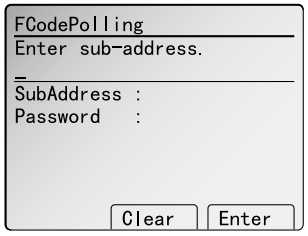
F-Code polling

1 Press **MENU** and select **"FCodePolling".**

2 Press **[Enter]**.

3 Use the numeric keypad to enter the appropriate sub-address in the remote machine.

Note: If you make a mistake, press **[Clear]** to erase the character, then enter the correct number.



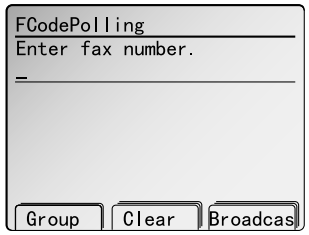
4 Press **[Enter]**.

5 Use the numeric keypad to enter the password.

Note: If this sub-address does not have a password, skip to next step.

6 Press **[Enter]**.

7 Enter the fax number either by pressing a one-touch key, entering a speed-dial number or dialling from the numeric keypad.

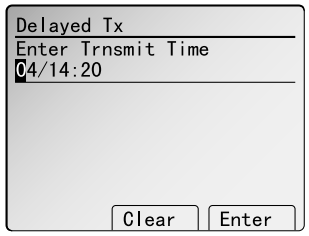


Important: Do ***not*** press **START,** if you want to delay this transmission.

8 What you do now depends on when you want the transmission to begin.

- To have it begin *now*, skip to step 11.
- To delay it, go on to step 9.

9 Press **MENU**, select **"Delayed Tx"** and then press **[Enter]**.
The LCD shows (see right):



10 Use the numeric keypad to enter the day and time when the transmission should begin, then press **[Enter]**.

11 Press **START**.

If in step 8 you chose an immediate transmission, your fax machine begins dialling. If you chose a delayed command, the machine shows "Reserved" on the LCD, indicating that it has stored the command in memory and will complete it later.

Programmable one-touch keys

Using the power of programmable one-touch keys

In order to complete some operations on your machine, you may have to follow several steps and press several different buttons. But programming your machine's *one-touch keys* (**79–84**) can reduce those many steps to a simple press of a key.

You can "teach" the one-touch keys to carry out any of the following operations:

Communications functions:

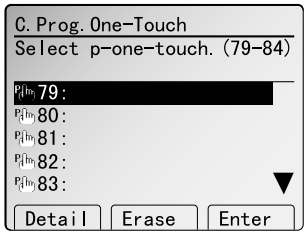
- Delayed transmission (explained on pages 2.10–2.11)
- Broadcasting (pages 2.9)
- Regular polling (*not* continuous) (page 2.22)
- Batch transmission (pages 2.12–2.14)
- F-Code transmission (page 2.35)
- F-Code polling (pages 2.35–2.36)

Programming a delayed transmission

To program a delayed transmission into a programmable one-touch key:

1 Press **MENU, C, [Enter].**
The LCD shows the programmable one-touch number list.

2 Select the programmable one-touch number that you want to program or change.

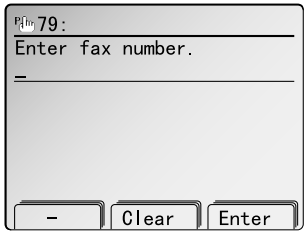


Note: If you're changing a previously stored command:
If your previous command for this key was for a delayed operation and you want to keep this key programmed for a delayed operation, use these instructions to make changes.

If you want to assign this key to a completely different operation, overwrite a previously stored command to the new one.

3 Press **[Enter].**

4 Use the numeric keypad to enter the fax number *exactly* as your machine should dial it, including whatever codes your phone system requires. The number can be up to 40 characters in length.

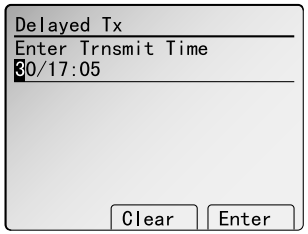


5 Press **[Enter].**

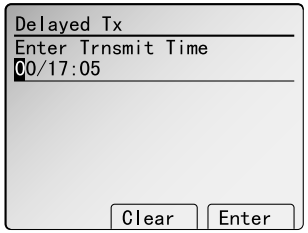
6 Select **"Delayed Tx"** and press **[Enter].**

7 Next, tell your fax to carry out this delayed command one of these ways:

Option 1: Perform the command *once* at a certain time on a certain day of the month. (For example, "Do this at 5:05 PM on the 30th.")
To select this option, use the numeric keypad to enter the date and time when the fax should perform the command.



Option 2: Perform the command at a certain time *each day you press the key*. (For example, "Do this at 5:05 PM today.")
To select this option, use the numeric keypad to enter **0, 0** and then the time the fax should perform the command.



8 Press **[Enter], [Exit]**.

9 The machine will return to step 2.

Note: When the delayed transmission is programmed, the ⏲ symbol is appeared in the programmable one-touch number list on the LCD.

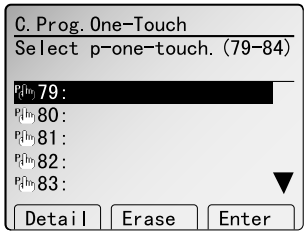
If you want to enter or change *another* key's programming, repeat steps 2-9.
If you *do not* want to enter or change *any other* key's programming, press **RESET.** Your machine returns to standby mode.

Programming a broadcast / group

Programming a broadcast is very similar to programming a delayed transmission. But instead of sending to just one phone number, you set up multiple numbers for the transmission.

To program a broadcast / group into a programmable one-touch key:

1 Press **MENU, C, [Enter].**
The LCD shows the programmable one-touch number list.



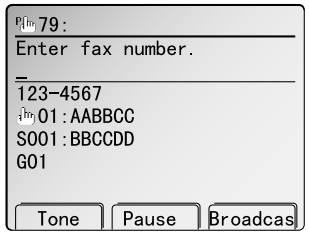
2 Select the programmable one-touch number that you want to program or change.

Note: If you're changing a previously stored command:
If your previous command for this key was for a broadcast / group transmission and you want to keep this key programmed for a broadcast / group transmission, use these instructions to make changes.

If you want to assign this key to a completely different operation, overwrite a previously stored command to the new one.

3 Press **[Enter].**

4 Use the numeric keypad to enter up to 330 fax numbers — you can use any combination of call groups, one-touch keys, speed-dial numbers and manually-dialled numbers.



To add more fax numbers, press **[Broadcas]** between each one. If **[Broadcas]** is not appeared on the LCD, press **NEXT** until it appears.

To enter a *speed-dial number*, press **SPEED DIAL/TEL INDEX** and the number's three-digit identifier.

To enter a *call group*, press **[Group]** and the group's identifier number. If **[Group]** is not appeared on the LCD, press **NEXT** until it appears.

Note: If you enter characters by mistake, press **[Clear]** to erase them. Or press ▲ or ▼ of the cursor key to select the number then press **[Clear]**.

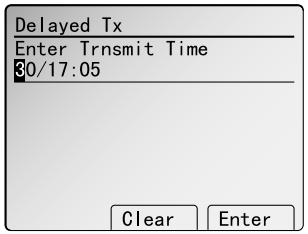
5 Press **[Enter].**

6 If you want the broadcast to begin *immediately* every time you press the key, press **[Exit]** and skip to step 9.

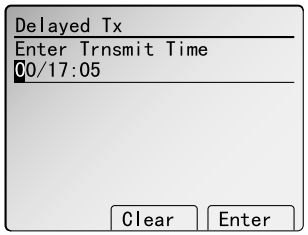
If you want to *delay* the broadcast, select **"Delayed Tx"** and press **[Enter].**

7 Next, tell your fax to carry out this delayed command one of these ways:

Option 1: Perform the command *once* at a certain time on a certain day of the month. (For example, "Do this at 5:05 PM on the 30th.") To select this option, use the numeric keypad to enter the date and time when the fax should perform the command.



Option 2: Perform the command at a certain time *each day you press the key*. (For example, "Do this at 5:05 PM today.") To select this option, use the numeric keypad to enter **0, 0** and then the time the fax should perform the command.



8 Press **[Enter], [Exit]**.

9 The machine will return to step 2.

Note: When the delayed transmission is programmed, the ◴ symbol is appeared in the programmable one-touch number list on the LCD.

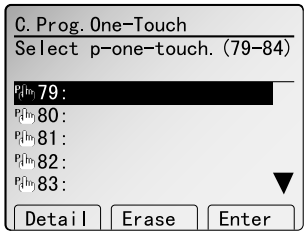
If you want to enter or change *another* key's programming, repeat steps 2-9.
If you *do not* want to enter or change *any other* key's programming, press **RESET.** Your machine returns to standby mode.

Programming regular polling

Note: You cannot program *continuous* polling into a programmable one-touch key. For more information on continuous polling, see page 2.22.

To program a regular polling operation into a programmable one-touch key:

1 Press **MENU, C, [Enter].**
The LCD shows the programmable one-touch number list.



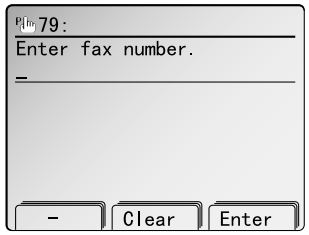
2 Select the programmable one-touch number that you want to program or change.

Note: If you're changing a previously stored command:
If your previous command for this key was for a polling transmission and you want to keep this key programmed for a polling transmission, use these instructions to make changes.

If you want to assign this key to a completely different operation, overwrite a previously stored command to the new one.

3 Press **[Enter].**

4 Use the numeric keypad to enter the fax number *exactly* as your machine should dial it, including whatever codes your phone system requires. The number can be up to 40 characters in length.



5 Press **[Enter].**

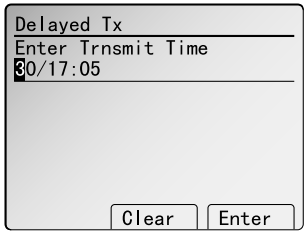
6 Select **"Polling"** and press **[Enter].**

7 If you want the polling to begin *immediately* every time you press the key, press **[Exit]** and skip to step 10.

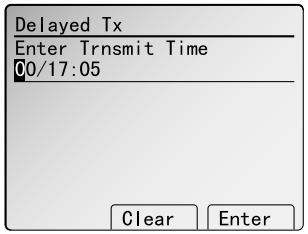
If you want to *delay* the polling, select **"Delayed Tx"** and press **[Enter].**

8 Next, tell your fax to carry out this delayed command one of these ways:

Option 1: Perform the command *once* at a certain time on a certain day of the month. (For example, "Do this at 5:05 PM on the 30th.")
To select this option, use the numeric keypad to enter the date and time when the fax should perform the command.



Option 2: Perform the command at a certain time *each day you press the key*. (For example, "Do this at 5:05 PM today.")
To select this option, use the numeric keypad to enter **0, 0** and then the time the fax should perform the command.



9 Press **[Enter], [Exit]**.

10 The machine will return to step 2.

Note: When the regular polling is programmed, the symbol is appeared in the programmable one-touch number list on the LCD.

Note: When the delayed transmission is programmed, the symbol is appeared in the programmable one-touch number list on the LCD.

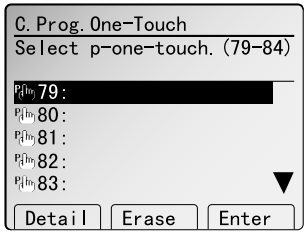
If you want to enter or change *another* key's programming, repeat steps 2-10.
If you *do not* want to enter or change *any other* key's programming, press **RESET.** Your machine returns to standby mode.

Programming a batch transmission

For this operation to work, two things must be true:

- The batch box you're using must exist on your fax machine.

To program a batch transmission into a programmable one-touch key:

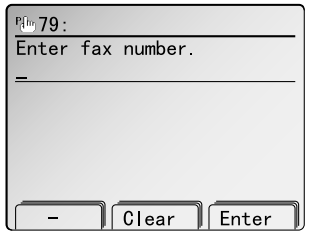


1. Press **MENU, C, [Enter].**
   The LCD shows the programmable one-touch number list.
2. Select the programmable one-touch number that you want to program or change.

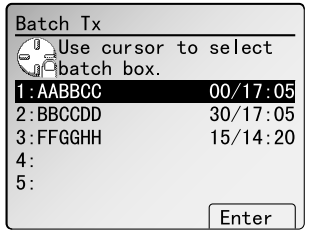
Note: If you're changing a previously stored command:
If your previous command for this key was for a batch transmission and you want to keep this key programmed for a batch transmission, use these instructions to make changes.

If you want to assign this key to a completely different operation, overwrite a previously stored command to the new one.

3. Press **[Enter].**



4. **Do not** enter any numbers and characters here.
5. Press **[Enter].**



6. Select the batch box you want to assign to this programmable one-touch key.
7. Press **[Enter]**.
8. The machine will return to step 2.

Note: When the batch box transmission is programmed, the ◴ and 🖷 symbol are appeared in the programmable one-touch number list on the LCD.

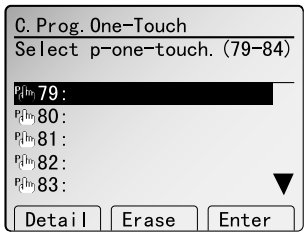
If you want to enter or change *another* key's programming, repeat steps 2-8.
If you *do not* want to enter or change *any other* key's programming, press **RESET.** Your machine returns to standby mode.

Programming an F-Code transmission

For this operation to work, two things must be true:

- You must know how the remote fax is using each F-Code box to which you're transmitting — for example, as a security box or a relay box. Different fax manufacturers may use slightly different terms, but the concepts are the same.
- You must know the remote fax's ITU-T sub-address and password for each box to which you want to transmit.

To program an F-Code transmission into a programmable one-touch key:

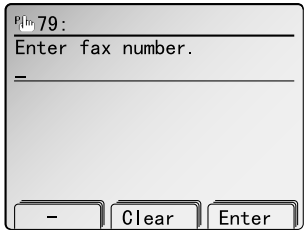


1. Press **MENU, C, [Enter].**
   The LCD shows the programmable one-touch number list.
2. Select the programmable one-touch number that you want to program or change.

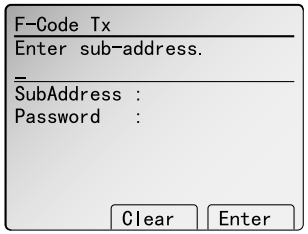
Note: If you're changing a previously stored command:
If your previous command for this key was for an F-Code transmission and you want to keep this key programmed for an F-Code transmission, use these instructions to make changes.

If you want to assign this key to a completely different operation, overwrite a previously stored command to the new one.

3. Press **[Enter].**

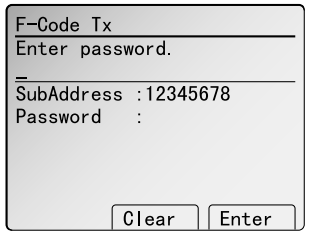


4. Use the numeric keypad to enter the fax number *exactly* as your machine should dial it, including whatever codes your phone system requires. The number can be up to 40 characters in length.
5. Press **[Enter].**
6. Select **"F-Code Tx"** and press **[Enter].**



7. Use the numeric keypad to enter the ITU-T sub-address for the box to which you want to send the document.
8. Press **[Enter]**.

9 Use the numeric keypad to enter the appropriate ITU-T password for the box.



Note: If there isn't a ITU-T password for this box, skip to step 10.

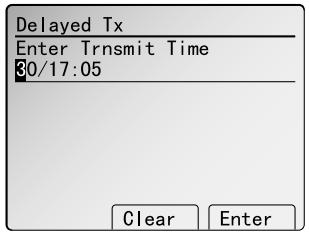
10 Press **[Enter]**.

11 If you want the F-Code transmission to begin *immediately* every time you press the key, press **[Exit]** and skip to step 14.

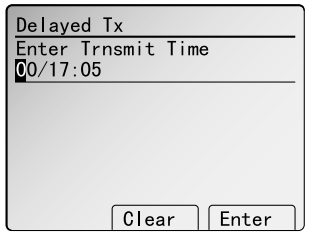
If you want to *delay* the F-Code transmission, select **"Delayed Tx"** and press **[Enter].**

12 Next, tell your fax to carry out this delayed command one of these ways:

Option 1: Perform the command *once* at a certain time on a certain day of the month. (For example, "Do this at 5:05 PM on the 30th.") To select this option, use the numeric keypad to enter the date and time when the fax should perform the command.



Option 2: Perform the command at a certain time *each day you press the key*. (For example, "Do this at 5:05 PM today.") To select this option, use the numeric keypad to enter **0, 0** and then the time the fax should perform the command.



13 Press **[Enter], [Exit]**.

14 The machine will return to step 2.

Note: When the F-Code transmission is programmed, the symbol is appeared in the programmable one-touch number list on the LCD.

Note: When the delayed transmission is programmed, the symbol is appeared in the programmable one-touch number list on the LCD.

If you want to enter or change *another* key's programming, repeat steps 2-14. If you *do not* want to enter or change *any other* key's programming, press **RESET.** Your machine returns to standby mode.

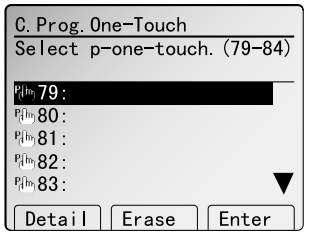
Programming F-Code polling

For this operation to work, three things must be true:

- The document which you're polling must exist in the remote fax's F-Code box (ITU-T standard sub-addressing/password box).
- You must know the remote fax's ITU-T sub-address and password (if any) for each box you want to poll.

To program an F-Code polling operating into a programmable one-touch key:

1 Press **MENU, C, [Enter].** The LCD shows the programmable one-touch number list.



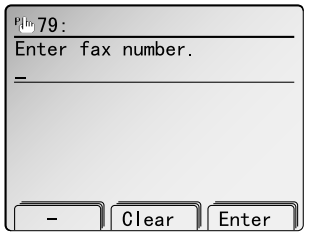
2 Select the programmable one-touch number that you want to program or change.

Note: If you're changing a previously stored command:
If your previous command for this key was for an F-Code polling operation and you want to keep this key programmed for an F-Code polling operation, use these instructions to make changes.

If you want to assign this key to a completely different operation, overwrite a previously stored command to the new one.

3 Press **[Enter].**

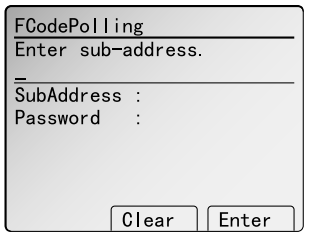
4 Use the numeric keypad to enter the fax number *exactly* as your machine should dial it, including whatever codes your phone system requires. The number can be up to 40 characters in length.



5 Press **[Enter].**

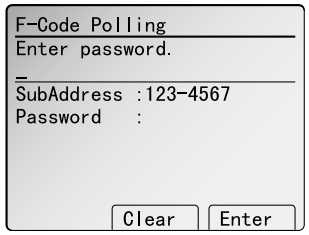
6 Select **"FCodePolling"** and press **[Enter].**

7 Use the numeric keypad to enter the ITU-T sub-address for the box to which you want to send the document.



8 Press **[Enter]**.

9 Use the numeric keypad to enter the appropriate ITU-T password for the box.



Note: If there isn't a ITU-T password for this box, skip to step 10.

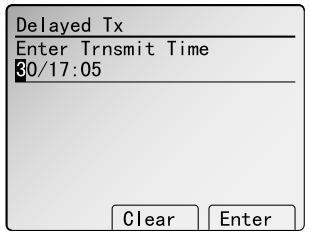
10 Press **[Enter]**.

11 If you want the F-Code polling to begin *immediately* every time you press the key, press **[Exit]** and skip to step 14.

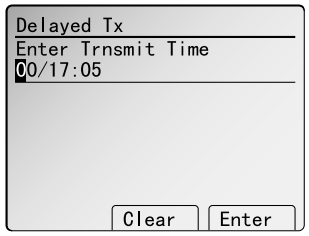
If you want to *delay* the F-Code polling, select **"Delayed Tx"** and press **[Enter].**

12 Next, tell your fax to carry out this delayed command one of these ways:

Option 1: Perform the command *once* at a certain time on a certain day of the month. (For example, "Do this at 5:05 PM on the 30th.")
To select this option, use the numeric keypad to enter the date and time when the fax should perform the command.



Option 2: Perform the command at a certain time *each day you press the key*. (For example, "Do this at 5:05 PM today.")
To select this option, use the numeric keypad to enter **0, 0** and then the time the fax should perform the command.



13 Press **[Enter], [Exit]**.

14 The machine will return to step 2.

Note: When the F-Code transmission is programmed, the symbol is appeared in the programmable one-touch number list on the LCD.

Note: When the delayed transmission is programmed, the symbol is appeared in the programmable one-touch number list on the LCD.

If you want to enter or change *another* key's programming, repeat steps 2-14.
If you *do not* want to enter or change *any other* key's programming, press **RESET.** Your machine returns to standby mode.

Erasing a programmable one-touch key

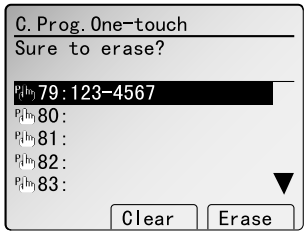
1 Press **MENU, C, [Enter].**
The LCD shows the programmable one-touch number list.

2 Select the programmable one-touch key which you want to erase.

Note: You can select the programmable one-touch key by pressing that key on the control panel.

Note: You can press **[Detail]** to see the number which has been programmed in that key.

3 Press **[Erase].** The LCD shows:



Important: If you want to quit without erasing the one-touch number you've selected, press **[Cancel].** The fax will return to step 2.

4 Press **[Erase]** to erase the programmable one-touch number.

To erase another programmable one-touch number, repeat steps 2–4.
Or press **RESET** to return to standby mode.

Printing a list of your programmable one-touch keys

You fax machine can print a list of the commands you've stored in your programmable one-touch keys.

The list includes:

(1) each key's one-touch number
(2) the fax/telephone number
(3) when the command should start
(4) which command you've selected
(5) if applicable, the selected call group(s) or F-Code box(es) you've stored in the key
(6) the individual settings for each key

To print a list of programmable one-touch keys, press **MENU, C, [List].**

Fax dialling with programmable one-touch

To dial a fax call using a programmable one-touch number:

1. Place the document and select resolution and contrast you require.
2. Press the programmable one-touch key in which you've stored the fax communication command.

Your fax will perform the operation now, or at whatever time you programmed.

Note: To review the details of each operation, review the instructions for that operation. See page 2.37 for a list of each operation and where to find it.

Security features

Your machine has a number of security features to keep your private fax documents private, avoid unwanted outside communication and even protect against unauthorized use of your machine.

These security features include: **(1)** security reception, **(2)** PIN mask, **(3)** security transmission, **(4)** closed network, **(5)** block junk fax, and **(6)** department codes.

The passcode

Your machine has a *passcode protection* system which must be turned on in order to use the security features listed above.

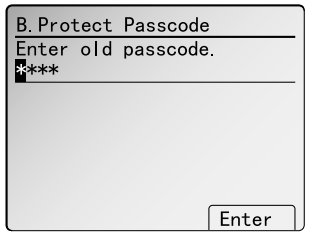
To set your machine's passcode:

1. Decide on the four-digit passcode (*0001–9999)* you want to use. *Write it down*, and *put it in a safe place.*

   Important: Do *not* use *0000*. This turns off passcode protection.

2. Press **MENU, [Mach Set].**

3. Select **"B. Protect Passcode"** and then press **[Enter].** The LCD shows (see right):

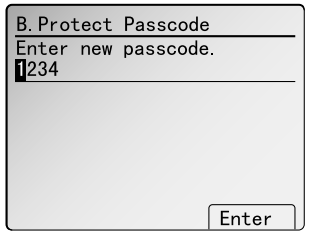


4. If you are *creating* a passcode, use the numeric keypad to enter *0000*.
   If you are *changing* an *existing* passcode, enter the existing passcode.

5. Press **[Enter].**

6. Enter the new four-digit passcode.
   For example, we've entered *1234*:

7. Press **[Enter]** to save the passcode.



Note: Any time you want to turn off the passcode, change the passcode back to *0000* by repeating steps 2–7 and entering *0000* in step 6.

Security reception

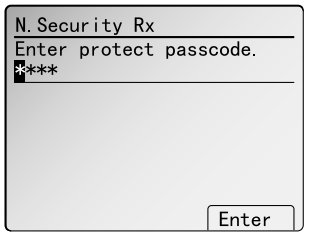
Security reception tells your machine to keep *all* received faxes in memory (but not print them). Then you can print them out later, at your convenience. For example, you could use this if you're concerned about workers reading documents intended for your eyes only.

Important: For this feature to work, you must have activated the *passcode protection* as described on left column. You must also *know* the passcode.

Note: In the following instructions, your machine's LCD shortens the word *Transmission* to *Tx* and the word *Receive* to *Rx*.

Activating security reception

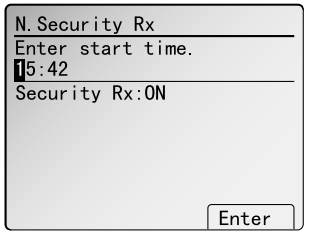
1. Press **MENU, N, [Enter].** The LCD shows (see right):



2. Use the numeric keypad to enter the protection passcode. Here we've entered 1234:

3. Press **[Enter]**.

4. Select **"On"**, then press **[Enter]**.
   The LCD shows the machine's current clock setting:



5. If you want security reception to begin *now* (and at this same time every day), skip to step 7.
   Otherwise, go on to step 6.

6. Use the numeric keypad to enter the time (use a 24-hour format) when security reception should begin every day
   "Type over" the numbers displayed.

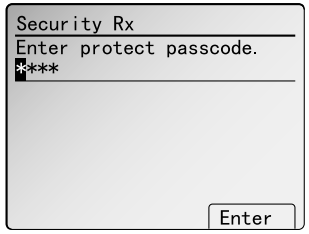
   To change a digit, move the cursor to that digit, then enter the correct digit.

7. Press **[Enter]** to save the setting.

Note: After setting for activating the security reception, you can assign the security reception to the Soft key (see page 2.15) to turn it on and off. Turning on the security reception by pressing a Soft key is not effected the time setting you entered at step 6. It begins the security reception immediately.

To turn the security reception on by pressing a soft key:

1. Program a Soft key which is assigned security reception. (See page 2.15.)
2. Press a Soft key that is assigned security reception.
3. Enter the protection passcode and then press **[Enter]**.
   The LED of the Soft key will light and the security reception begins immediately.



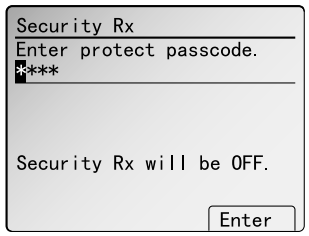
Note: To turn the security reception off, see "*Printing from security reception / Turning off security reception*," next column.

Printing from security reception / Turning off security reception

When security reception is on, an incoming fax goes directly into your machine's memory and the **MEMORY RECEIVE** light comes on. But the incoming fax message is not printed.

To retrieve the faxes received during this security reception (and to return your machine to normal reception until the next time):

1. Press **MENU, N, [PrintDoc]**.
   If you using the Soft key, press the Soft key instead of this operation.
   In which way, the LCD shows (see right):
2. Use the numeric keypad to enter the passcode.
3. Press **[Enter]**.
   - If you've entered the correct passcode, your fax machine will print all documents in its memory and then erase them. Then it will turn security reception off until the next time you've scheduled security reception or the Soft key which programmed security reception is pressed.
     If you using the Soft key, the LED light of the Soft key will be off.
   - If you've entered an incorrect passcode, your fax machine will refuse to print, and security reception remains on.



Masking the PIN

To prevent unauthorized long-distance calls, some office telephone systems require you to enter a *personal identification number (PIN)* whenever you dial long distance.

Your fax's *PIN mask feature* helps you keep that PIN number private. With the PIN mask activated, you can dial a fax number plus a PIN, but the PIN will not appear in a journal, error message printout, delayed command list or a TCR. The PIN may be up to eight characters in length. It also can include the * or # symbols, and it can be entered from the numeric keypad.

There are three possible settings for the PIN mask:

- *Off* — Turns off the PIN mask feature. Any PIN you enter will appear on any display or printout which shows the number you dial.
- *Mode 1* — Each *remote fax unit* has a departmental PIN access code.
- *Mode 2* — Each *fax user* has a departmental PIN access code.

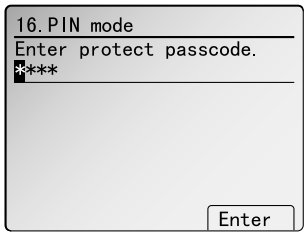
Note: If you select Mode 1 and you will use a one-touch or speed-dial number, you must store the remote unit's PIN access code within that number. However, if you select Mode 2, this isn't necessary. (See "Autodialling while using the PIN mask," next page for further details.)

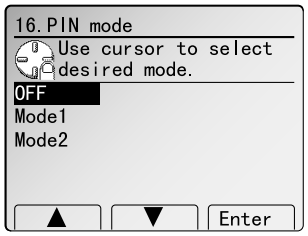
Note: If you select either Mode 1 or Mode 2 and will be using batch transmission (see pages 2.12 – 2.14), you must store the PIN access code for the remote unit within the appropriate batch box.

Activating the PIN mask

Important: For this feature to work, you must have activated the *passcode protection* as described on page 2.44. You must also *know* the passcode.

1. Press **MENU, J, 1, 6, [Enter].**
   The LCD shows (see right):
2. Use the numeric keypad to enter the four-digit passcode.
   Note: If you enter an invalid passcode, the machine's security feature rejects the attempt and returns to standby mode.
3. Press **[Enter].**
4. Select desired mode.
5. Press **[Enter].**
6. Press **RESET** to return to standby mode.



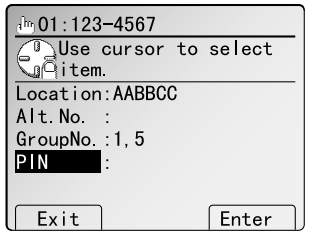


Autodialling while using the PIN mask

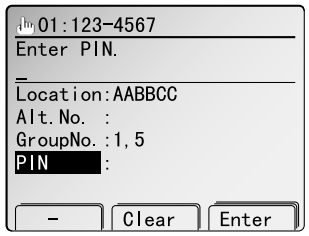
Note: The following instructions presume you understand how to set and use your machine's autodialer. If you need to review, see pages 2.1–2.8.

If you chose "Mode 1" — the PIN goes in

In Mode 1, before autodialling a number for the first time, you must add the PIN to the stored one-touch key or speed-dial number. Here's how:



1. Begin by creating or changing an entry in the autodialer. (See pages 2.1–2.8 if necessary.) While you're setting this up, the machine asks you to enter the PIN. The LCD shows:
2. Select **"PIN"** and press **[Enter]**.
3. Use the numeric keypad to enter the four-digit passcode.



4. Press **[Enter].**
5. Use the numeric keypad to enter the desired PIN, up to eight characters in length.
6. Press **[Enter]** to save the PIN.

   Note: If you press **[Enter]** without entering the PIN, the machine beeps, indicates "Invalid Number" on the LCD and then returns to step 5.

Now you may autodial the number as usual.

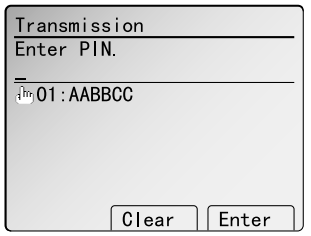
Important: While in PIN Mode 1, *any* autodialer numbers you use must include the PIN. This also applies to autodialer numbers used with batch transmission (see pages 2.12–2.14) or programmable one-touch keys (see pages 2.37–2.43).

Note: If you select either Mode 1 or Mode 2 and will be using batch transmission, you must store the PIN access code for the remote unit within the appropriate batch box. (See "Performing batch transmission while using the PIN mask," page 2.45.)

If you chose "Mode 2" — as you autodial, load the code

In this mode, you *don't* have to add the PIN to the autodialer setting. Instead, you enter the PIN manually each time you autodial:

1. Dial the number as you normally would, using the autodialer.
2. Use the numeric keypad to enter the PIN.
3. Press **[Enter].**
   Your machine dials the number.

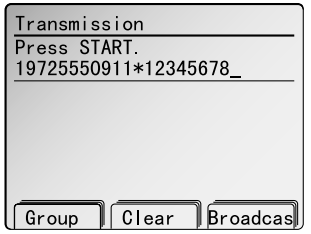


Note: If you select either Mode 1 or Mode 2 and will be using batch transmission (see pages 2.12–2.14), you must store the PIN access code for the remote unit within the appropriate batch box. (See "Performing batch transmission while using the PIN mask," page 2.45.)

Dialling from the numeric keypad while using the PIN mask

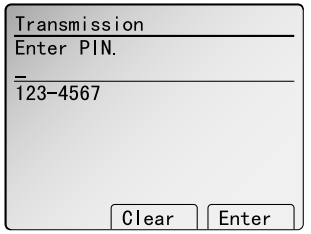
If you've specified Mode 1 — use "star" power

1. Enter the phone number, then press the ***** ("star") key and enter the PIN.
   The PIN always goes last.
   For example, to dial *19725550911* with a PIN of "12345678", enter *19725550911*12345678:*
2. Press **START.** The PIN disappears from the display, and your machine dials the desired phone number.



If you've specified Mode 2 — the machine guides you

1. Enter the phone number as usual.
2. Press **START.** The LCD shows:
3. Use the numeric keypad to enter the PIN.
4. Press **[Enter].**
   Your machine dials the number.



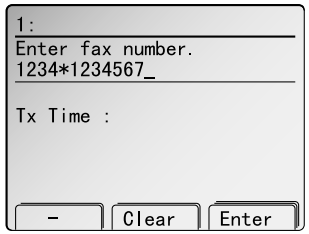
Performing batch transmission while using the PIN mask

Note: The following instructions presume you are familiar with how to set and use both your machine's autodialer and its batch transmission feature. If you need to review, see pages 2.1–2.8 for more on the autodialer and/or pages 2.12–2.14 for more on batch transmission.

If you've specified Mode 1 or Mode 2

Important: Any autodialer number you use with batch transmission *must* include the PIN. (To review how to include this information in an autodialer number, review the Mode 1 instructions under "Autodialling while using the PIN mask," page 2.46.)

Before sending a batch transmission the first time, you must store the PIN within its batch box. Here's how:



1. Follow the steps for creating or modifying a batch box (page 2.12).
   The LCD asks for the fax number (here, we're working with batch box 1):
2. Enter an autodialer number, or use the numeric keypad to enter the fax number, to which the batch transmission should go.

   Important: If you're entering a number from the numeric keypad, enter the fax number, followed by the ***** ("star") key and then the PIN.
3. Press **[Enter]** to save the setting.

   Note: If you press **[Enter]** without entering the PIN, the fax machine beeps, indicates "No PIN Number" on the LCD and then returns you to step 2.
4. Continue with the steps for creating or modifying a batch box (page 2.12).

Now you can perform batch transmission to this box while the PIN mask is activated.

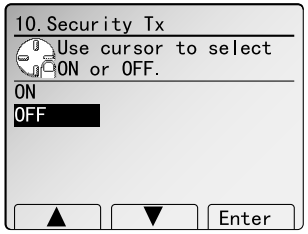
Setting security transmission

Your fax's *security transmission* feature provides extra assurance that your documents go where you're sending them. When this feature is activated and your machine sends a fax, the machine compares the last four digits of the dialled number to the other unit's Subscriber ID (the phone number at the top of that unit's transmissions). If these digits match, your call goes through. If they don't, your machine disconnects the call and prints an error message telling you to check the condition of the remote unit.

Before you activate this feature, consider:

- *Not all fax machine owners enter their phone numbers in their Subscriber IDs.* — Indeed, some machines don't even *have* a Subscriber ID. So, with security transmission activated, your machine would disconnect its calls to such machines.
- *Access codes can cause confusion.* — If an autodialer entry ends with a long-distance or other access codes, activating this feature prevents calls to that fax.

Note: In the following instructions, your fax's LCD abbreviates *Transmission* as *Tx*.



1. Press **MENU, J, 1, 0, [Enter].**
2. Select desired setting.
3. Press **[Enter]** to save the setting.

Setting for use with a closed network

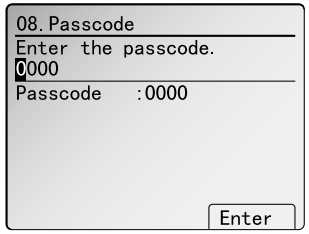
For maximum communications security, use a *closed network*. This limits your machine to only communicating with other Muratec fax machines which can "present" the proper passcode.

Important: The passcode you use for closed network operation is **not** the same as the protection passcode.

Once your machine is set up for a closed network, your machine will disconnect calls coming in from fax machines other than Muratec fax machines.

To set your fax machine's closed network password:

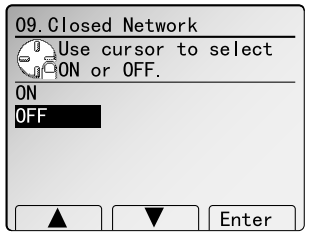
1. Decide on the four-digit closed network passcode *(0001–9999)* you want to use. **Write it down**, and *put it in a safe place.*
2. Press **MENU, J, 0, 8, [Enter].** The LCD shows the current code:
3. Use the numeric keypad to enter the desired four-digit *closed network passcode.*
4. Press **[Enter]** to save the setting.



Note: To turn off the closed network passcode and return to normal fax reception, change the code to *0000* by repeating steps 1–4 and entering *0000* in step 3.

To set your fax machine to operate in a closed network:

1. Press **MENU, J, 0, 9, [Enter].** The LCD shows your fax's current setting:
2. Select desired mode.
3. Press **[Enter]** to save the setting.



Setting Block Junk Fax

Your fax machine's *Block Junk Fax* feature lets you bar the gates against unauthorized incoming faxes ("junk fax"). But before you block junk fax, first understand *how* this feature works, to determine if it's right for you. There are four possible settings for Block Junk Fax:

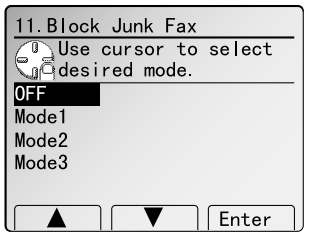
- *Off* — The feature isn't activated.
- *Mode1* — Your fax machine checks whether the last four digits of any phone number in your autodialer matches the last four digits of the remote fax's subscriber ID (the phone number part of the TTI). If it doesn't find a match, your machine disconnects the call.
- *Mode2* — This mode rejects any call from a number whose last eight digits match any number in the *blocked numbers list* (explained later). Your machine can hold up to 30 blocked numbers.
- *Mode3* — This rejects numbers that are *not* in the autodialer and also rejects numbers that *are* in the blocked numbers list. This lets you keep a number on your autodialer for transmission to it, while still blocking its incoming calls by putting it in the blocked numbers list.

But before you activate the Block Junk Fax feature, please consider:

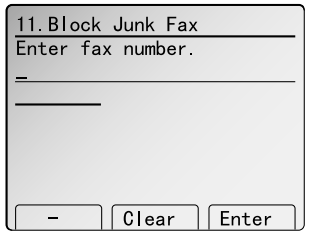
- *Not all fax machine owners enter their phone numbers in their Subscriber IDs.* — With Block Junk Fax activated, your machine would reject faxes from these machines.
- *Access codes can cause confusion.* — If an autodialer entry ends with extra codes, such as long-distance codes, Block Junk Fax will block out calls from those faxes.

To set Block Junk Fax:

1. Press **MENU, J, 1, 1, [Enter].** The LCD shows your fax's current setting:
2. Select desired mode.
3. Press **[Enter]** to save the setting. What you do next depends on what you selected in step 2:
   - If you selected *Off* or *Mode1*, press **RESET** to return to standby mode.
   - If you selected either *Mode2* or *Mode*3, go on to step 4.



4 The LCD now shows blocked numbers list.



If you want to enter or erase a number, go on to step 5.
Otherwise, press **[Enter]** and skip to step 7.

5 Use the numeric keypad to enter *the last eight characters* of a fax number you want to block. For example, if you want to block a fax from someone with a Subscriber ID of *972-555-3038,* you should enter **5, 5, 5, [–], 3, 0, 3, 8.**

If you want to erase an existing entry in the blocked numbers list, press ▲ or ▼ of the cursor key to select the number then press **[Clear]**.

6 Press **[Enter]** to save the setting.

7 Press **RESET** to return to the standby mode.

Printing a list of blocked numbers list

To print a list of blocked numbers list, press **MENU, J, 1, 1, [List]**.

Using department codes

You can keep track of how your machine is used through its *department code* feature. When the department code setting is activated, the machine reminds each user to enter the department code before sending or polling a document. The Activity Journal then keeps track of fax transactions by department.

After you turn on this setting, assign specific code numbers to your office's fax users and tell them to enter these department codes before sending faxes.

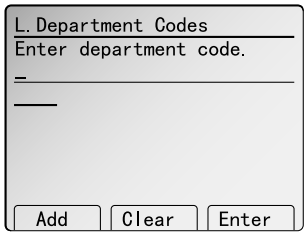
Note: Please note that using this setting may block access to the fax machine.

Entering a department code

Your machine can hold up to 100 separate department codes.

To enter a department code:

1 Press **MENU, L, [Enter].**
The LCD shows the department code list.



Note: If department code operation is *protected* (see page 2.50), the fax beeps briefly and then returns to standby mode. You will have to turn off the protection first, then repeat this step.

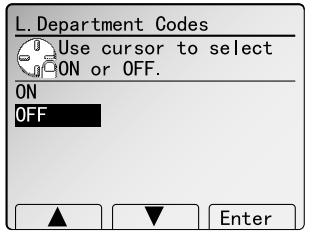
2 Use the numeric keypad to enter the four-digit department code, *0000–9999*.

If you want to erase an existing entry in the department code list, press ▲ or ▼ of the cursor key to select the number then press **[Clear]**.

3 Press **[Add]** to entry in the department code list.
If you want to enter another department code, repeat steps 2–3.

4 Press **[Enter]** to save the setting. The machine will return to standby mode.

Turning the department code setting on and off

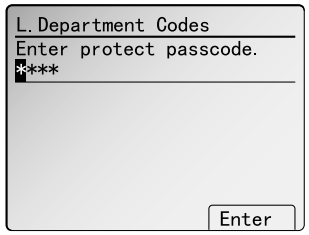


1. Press **MENU, L.**
2. Press **[Setting].**

   Note: If department code operation is *protected* (see below), the fax beeps briefly and then returns to standby mode. You will have to turn off the protection first, then repeat this step.
3. Select desired setting.
4. Press **[Enter].**

Turning department code protection on and off

Important: This feature will work only if you've activated the *passcode protection* (see page 2.44).



1. Press **MENU, L, NEXT.**
2. Press **[Protect].**
3. Use the numeric keypad to enter the four-digit passcode.
4. Press **[Enter].**
5. Select desired setting.
6. Press **[Enter]** to save the setting.

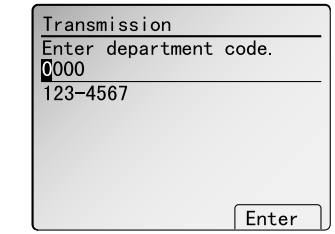
Sending a fax using a department code

For this operation to work, two things must be true:

- The four-digit department code must exist on your fax machine.
- You must know the department code.

1. Place the document and select resolution and contrast you require.
2. Enter the fax number by either pressing a one-touch key, entering a speed-dial number or dialling from the numeric keypad.

   If you enter the fax number using a one-touch key, skip to step 4. Otherwise, go on to step 3.
3. Press **START.**
4. Use the numeric keypad to enter the appropriate four-digit department code.
5. Press **[Enter]**.



Printing the department time list

The department time list includes the following information for each department code:

- *Time period* covered by the department time list
- Each *department code*
- *Total communication time* (in hours, minutes and seconds; *HH:MM:SS*) — Counts the communication time up to 999:59:59 (999 hours:59 minutes:59 seconds). If the fax exceeds the maximum time, it does not count further.
- *Total printed pages* — Counts the pages up to 65535 pages. If the fax exceeds the maximum number of pages, it counts the total pages from 0 (zero).

Note: If you want to clear the total counts of each department code, see "Clearing the current department time list", below.

To print the list, press **MENU, L, [List]**.

Note: If department code operation is *protected* (see left column), the fax beeps briefly and then returns to standby mode. You will have to turn off the protection first, then repeat the above.

Clearing the department time list

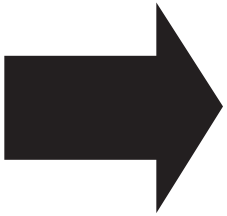
To clear the current total counts of each department code:

Press **MENU, L, NEXT, [Erase], [Erase].**

The total communication time and total printed pages for each department code are cleared. The department code will not be erased.

This page intentionally blank.

Entering settings for your machine



Settings for transmission 3.1

Settings for reception 3.4

Settings for dialling 3.6

Settings for operation 3.7

Settings for transmission

Scan settings

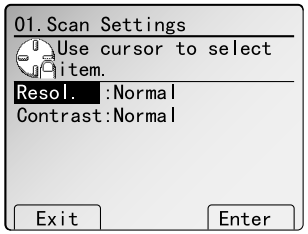
Default setting: *Primary resolution: Normal, Primary contrast: Normal*

Four different settings tell your machine how to scan documents. The initial factory settings are probably right for most applications, so try using them before changing any of these settings:

- **Primary resolution mode** — Sets the resolution for your documents. Choose either normal, fine, superfine ("S-Fine" on the LCD) or grayscale mode ("Gray").
- **Primary contrast mode** — Sets how light or dark you want faxed documents to be when they arrive at their destination.

Note: The primary settings you choose effect your fax activity only.

To set these modes:



1. Press **MENU, J, 0, 1, [Enter]**.
2. To set the primary resolution mode, select **"Resol."** then press **[Enter]**.
3. Select desired resolution mode, then press **[Enter]**.
4. To set the primary contrast mode, select **"Contrast"** then press **[Enter]**.
5. Select desired contrast mode using a cursor key, then press **[Enter]**.
6. Press **[Exit]** to exit this setting mode.
7. Press **RESET** to return to the standby mode.

By following the steps above, you've set your *defaults* for scanning. Before sending documents, you can "override" these default scan settings *for that transmission*.

To *override* the default resolution and contrast settings before sending a document:

- Press **RESOLUTION** to change the resolution.
- Press **CONTRAST** to change the contrast.

Once your document is transmitted, your machine returns to its default settings.

Setting ECM

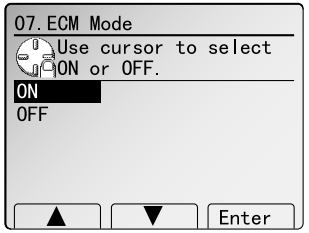
Default setting: *ON.*

"Line noise," or static on the line during a call, can easily disrupt the flow of data from one fax machine to another.

That's why your fax machine gives you the option of using *Error Correction Mode (ECM)*. When two fax machines communicate while running in ECM, the sending machine automatically *checks* the data as it sends. If the receiving fax machine can't verify the transmission, the first machine will re-send it as necessary.

Note: ECM gives you a better chance of transmitting a fax document over a bad phone line, but it could also slow down the transmission time. And the worse the line is, the slower the transmission. That's why the machine lets you turn ECM on or off as needed.

Note: Not all fax machines have ECM. If you've activated ECM and then transmit to a fax machine not currently using ECM, there will be no change in the fax transmission from a usual, non-ECM transmission.



1. Press **MENU, J, 0, 7, [Enter].**
   The LCD shows the current ECM setting:
2. Select **"On"** or **"Off"** using the cursor key.
3. Press **[Enter]** to save the setting.
4. Press **RESET** to return to the standby mode.

Memory transmission

Default setting: *ON.*

Your fax machine has a great memory! Take advantage of it, and you could:

Save Time. By using your fax machine's memory, you won't have to wait for your machine while it completes the transmission. Simply scan your document into your fax machine's memory, and you can walk away with your original in hand.

Save Money. If you're transmitting to another memory-equipped fax machine, your machine will send the document directly into the other machine's memory and hang up. (The receiving machine then prints out your message from its memory after the call has ended.) This cuts your actual on-line time to a minimum.

Save Even More Money. Set up a delayed command (see pages 2.10–2.11) to send your document after hours, and you can save more money, because the line charges will be cheaper.

The default transmission mode when the machine is turned on or when modes are cleared is memory transmission. You can change this setting, see below.

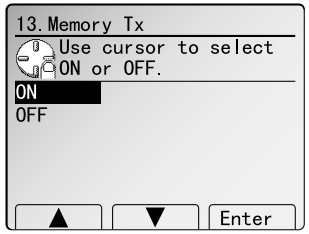
Note: Whether you decide to send your documents from memory or manually, you can override that choice one transmission at a time by pressing **MEMORY TRANSMIT** before you send your document. After completing the communication, your fax will return to the *default* setting.

Note: Some documents use up memory more quickly than others. They include documents with many pages and those with many dark areas. *When the machine's memory is full, it can transmit only through the document feeder.*

Note: When you use the flatbed scanner, the machine always uses memory transmission.

To change the default setting of memory transmission:

1. Press **MENU, J, 1, 3, [Enter].**
2. Select desired setting using the cursor key.
3. Press **[Enter]** to save the setting.



If the **MEMORY TRANSMIT** light glows, memory transmission is *on*.

If the **MEMORY TRANSMIT** light doesn't glow, memory transmission is *off*.

Quick Memory transmission

Default setting: *ON.*

Using Quick Memory transmission can save you time over standard memory transmissions.

For a *normal memory transmission*, your fax: **(1)** scans your entire document into memory, **(2)** dials the other fax machine, then **(3)** transmits the document.

But with *Quick Memory transmission*, your machine doesn't wait to scan all pages into memory before dialling. After it scans the first page of your document, your machine dials the call. While dialling, connecting and transmitting, your fax machine continues to scan in the remaining pages of the document.

You can set your fax to always use Quick Memory transmission as the default.

Important: Your fax machine's memory transmission feature must be turned on to use Quick Memory transmission (see left column).

To make Quick Memory transmission the default:

1. Press **MENU, J, 1, 8, [Enter].** The LCD shows:
2. Select "On" using the cursor key.
3. Press **[Enter]** to save the setting.

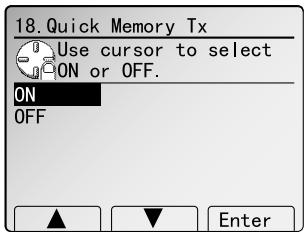
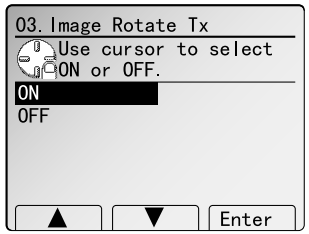


Image rotate transmission

Default setting: *ON.*

When this feature is activated, if you set A4-sized document in the sideways direction(), the image will be sent rotated by 90°.



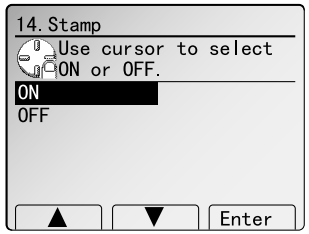
1. Press **MENU, J, 0, 3, [Enter].**
2. Choose desired setting you want using the cursor key. Then press **[Enter]**.
3. Press **RESET** to return to the standby mode.

Setting the confirmation stamp

Default setting: *OFF.*

You can set your fax machine so that it will automatically place a small blue ink *stamp* mark on the front of each *original* document that it successfully scans.

Important: Turn off this feature if you're sending documents you don't want the fax to stamp.



1. Press **MENU, J, 1, 4, [Enter].**
   The LCD shows your fax's current setting:
2. Select **"On"** or **"Off"** using the cursor key.
3. Press **[Enter]** to save the setting.
4. Press **RESET** to return to the standby mode.

Settings for reception

Print settings

You can set three parameters for printing received fax messages:

- Print reduction rate
- Reduction margin
- Paper save function

You set all three in the same procedure, discussed on next page. Following is a explanation for each:

Print reduction rate

Print reduction lets you set the machine to reduce large incoming documents to a size that fits the paper in your machine. (This setting doesn't affect copies you may make with your machine.)

Below are the options for both the print reduction and copy reduction settings:

Setting	What it does
Auto	Automatically reduces printouts at variable rates down to a minimum of 50%. Tries to reduce printout to fit on one sheet of your selected paper size. If it can't, print the image at 100% size on two or more pages.
100%	Does not reduce document. (Due to the sender's TTI, this may print *two* pages when receiving a one-page fax document. See *97%*,below.)
97%	Reduces an original so that the final printout of a one-page-document *(if the original isn't larger than the paper in your machine)* will only be one page long, even with the TTI.
91%	Reduces documents slightly more.
81%	Reduces documents even more. Helpful for some international stationery sizes, as well as special applications.
75%	Turns *legal-sized* originals into *letter-sized* printed copies.

Reduction margin

Your fax machine's *reduction margin* is measured in millimeters (mm). We'll define *reduction margin* by explaining how it's used:

When a fax message enters your machine's electronic brain, the machine measures the message's length and compares it to **(a)** the length of your selected paper **plus (b)** the reduction margin you set. If the length of the incoming message is shorter than **(a)** and **(b)** put together, your machine prints the message on just one sheet. If it's longer, your machine prints the message on more than one sheet.

Note: An *Auto* reduction setting and a reduction margin setting of *24mm* will print most incoming faxes as single pages. Try this combination first and then, only if you have problems with it, select different settings.

Paper save function

There are two methods of paper save function, *Half-page reception* and *2-sided reception*.

Half-page reception

Half-page reception can conserve paper if some of the faxes you receive are half-page, "memo-sized" messages. When activated, this feature tells the machine to combine two of these half-page receptions onto a single sheet. Half-page reception only combines half-page messages sent back-to-back *during the same transmission*. It won't combine two half-page faxes from separate transmissions.

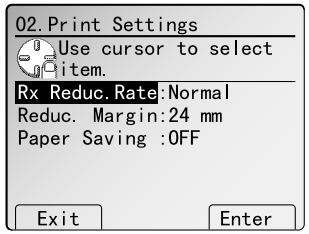
2-sided reception (Optional duplex unit is required.)

With this option installed, a received fax message can be printed on both sides of the recording paper.

Note: This feature works only when all the pages of a received document have the same width.

Adjusting the print settings

Default setting: *Rx reduction rate: Normal, Reduction margin: 24 mm, Paper saving:OFF.*

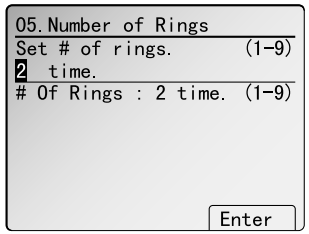


1. Press **MENU, J, 0, 2, [Enter].**
2. Select item you want to set using the cursor key. Then press **[Enter]**.
3. Select desired item and then press **[Enter]**.
4. If you want to change other items, repeat step 2-3.
5. When you finish, press **[Exit]**.
6. Press **RESET** to return to the standby mode.

Setting the number of rings

Default setting: *2 time.*

You can set how many times your fax machine will ring before answering a call. Choose from 1 to 9 rings.



1. Press **MENU, J, 0, 5, [Enter].** The LCD shows:
2. Use the numeric keypad to enter the number of rings you want, from 1 to 9.
3. Press **[Enter]** to save the setting.
4. Press **RESET** to return to the standby mode.

Setting ECM

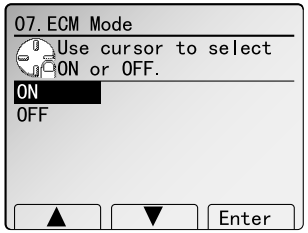
Default setting: *ON.*

"*Line noise,*" or static on the line during a call, can easily disrupt the flow of data from one fax machine to another.

That's why your fax machine gives you the option of using *Error Correction Mode (ECM)*. When two fax machines communicate while running in ECM, the sending machine automatically *checks* the data as it sends. If the receiving fax machine can't verify the transmission, the first machine will re-send it as necessary.

Note: ECM gives you a better chance of transmitting a fax document over a bad phone line, but it could also slow down the transmission time. And the worse the line is, the slower the transmission. That's why the machine lets you turn ECM on or off as needed.

Note: Not all fax machines have ECM. If you've activated ECM and then transmit to a fax machine not currently using ECM, there will be no change in the fax transmission from a usual, non-ECM transmission.



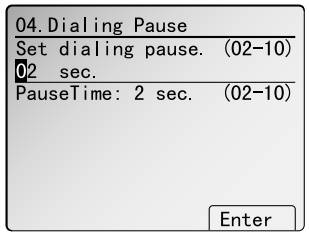
1. Press **MENU, J, 0, 7, [Enter].** The LCD shows the current ECM setting:
2. Select "On" or "Off" using the cursor key.
3. Press **[Enter]** to save the setting.
4. Press **RESET** to return to the standby mode.

Settings for dialling

Changing the dialling pause length

Default setting: *2 sec.*

The pause is set by the factory to last two seconds, but you can set it to last as long as ten seconds if necessary. To change the pause length:



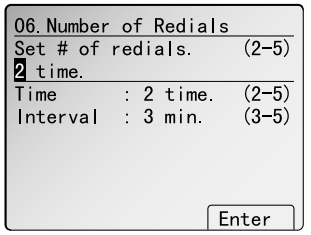
1. Press **MENU**, **J**, **0**, **4**, **[Enter]**.
2. Use the numeric keypad to enter the length you want for the dialling pause.

   Note: The length setting requires two digits. Always enter a leading zero for lengths less than 10 seconds.
3. Press **ENTER** to save the setting.

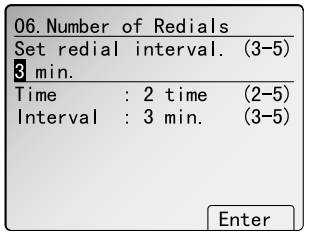
Changing redial settings

Default setting: *Number of redial: 2 times, Redial interval: 3 minute.*

It's up to you how many times the fax redials a number and how long it waits between redials (that length of time between calls is the *redial interval*).
To program the redial settings:



1. Press **MENU**, **J**, **0**, **6**, **[Enter].**
2. Use the numeric keypad to enter the number of redials you want. Choose from 2 to 5 redials.
3. Press **[Enter]** to save the setting.



4. Use the numeric keypad to enter the length you want between redial attempts. Choose from 3 to 5 minutes.
5. Press **[Enter]** to save the setting.
6. Press **RESET** to return to standby mode.

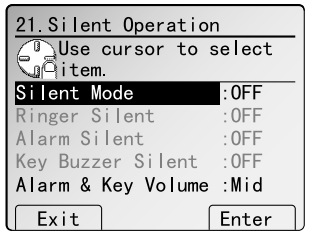
Settings for operation

Setting of the silent mode

Default setting: *OFF.*

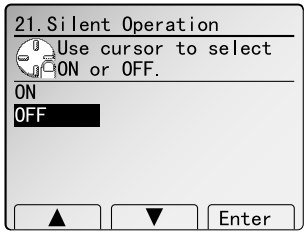
Silent mode allows you to mute the ringer, the alarm and the key tones.
To setting a silent mode:

1 Press **MENU, J, 2, 1, [Enter].**
The LCD shows your fax's current setting.
The silent mode has following settings:



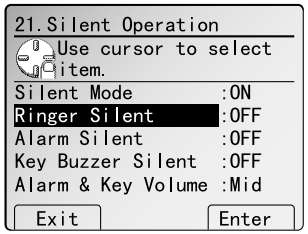
- **Silent mode** — If you set to this **"ON"**, the following three settings can be effective. If you chose **"OFF"**, the machine will ring and beep as usual, even if you set to the following settings on.
- **Ringer Silent** — If you want to mute a ringer that alerts you when you receive fax or voice call and a call request, chose **"ON"**. Otherwise, chose **"OFF"**.
- **Alarm Silent** — If you want to disable the sound your machine makes when an error occurs, and the beep your machine makes after sending or receiving a fax or making a copy, chose **"ON"**. Otherwise, chose **"OFF"**.
- **Key Buzzer Silent** — If you want to mute the key tone that your machine makes when you press the keys on the control panel, chose **"ON"**. Otherwise, chose **"OFF"**.
- **Alarm & Key Volume** — This setting can be effective if you set the **"Alarm Silent"** or **"Key Buzzer Silent"** to **"OFF"**. You can adjust the volume for the alarm and key tones. Also, when you set the **"Silent Mode"** to **"OFF"**, this setting is effective.

2 To effect the settings of the silent mode:
Select **"Silent Mode"** and press **[Enter]**.
Select **"ON"** and press **[Enter]**.
Note: If you chose **"OFF"**, the machine will ring and beep as usual, skip to step 9.



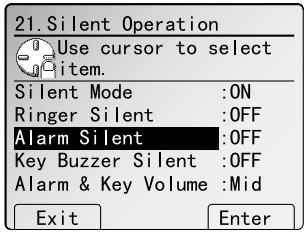
3 To set the **"Ringer Silent"**:
Select **"Ringer Silent"** and press **[Enter]**.
If you want to turn off the ringer, select **"ON"** and the machine will be quiet.
Otherwise, the machine will ring.

4 Press **[Enter]** to save the setting.



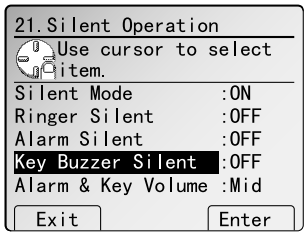
5 To set the **"Alarm Silent"**:
Select **"Alarm Silent"** and press **[Enter]**.
If you want to turn off the alarm, select **"ON"** and the machine will be quiet.
Otherwise, the machine will beep.

6 Press **[Enter]** to save the setting.



7 To set the **"Key Buzzer Silent"**:
Select **"Key Buzzer Silent"** and press **[Enter]**.
If you want to turn off the tones, select **"ON"** and the machine will be quiet.
Otherwise, the machine will beep when the keys are pressed.

8 Press **[Enter]** to save the setting.

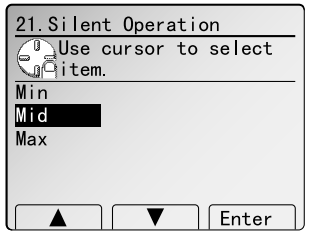


If you turned off the alarm or the key tones in the steps above, your machine gives you the option of setting the volume for the alarm and key tones, proceed to step 9.
If you didn't turn any of these off, skip to step 11.

9 To set the **"Alarm & Key Volume"**:

Select **"Alarm & Key Volume"** and press **[Enter]**.

Set the desired volume using the cursor key.



10 Press **[Enter]** to save the setting.

11 Press **[Exit]** to save the setting.

Adjust the monitor speaker's volume

Default setting: *Medium*.

You can set the volume of the monitor speaker, assuring that on-hook dialling will be as loud (or as soft) as you require.

1 Press **MONITOR/CALL** on the control panel. You now should hear a dial tone.

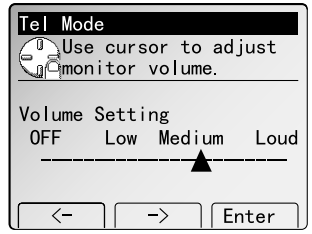
Important: If you don't hear a dial tone, make sure your fax machine is plugged into a working phone line.

2 If the volume you hear is satisfactory, skip to step 4.
Otherwise, proceed to step 3.

3 Adjust the volume as you wish:

To turn the volume up, press ►.
To turns the volume down, press ◄.

The LCD indicates the volume.



4 Press **MONITOR/CALL** again to hang up.

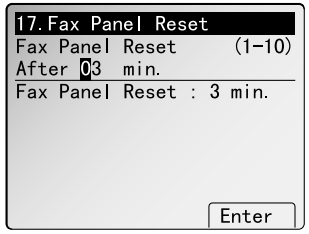
Panel auto reset time

Note: Default: After three minutes

The machine returns to its initial condition automatically after a certain period of time. You can change this time from 1 to 10 minutes.

Note: The machine first resets the LCD display, and after certain period of time it resets the key settings to the initial condition.

1. Press **MENU**, **J**, **1**, **7**, **[Enter]**.
2. Enter the time to auto resetting, and then press **[Enter]** to save the setting.
3. Press **RESET** to return to standby.



Printing your fax settings

After you've programmed settings into your machine, print a *fax settings list*. We recommend this, particularly if you're sharing the machine with other users, who might change the settings.

With this list, you can quickly confirm that all of your settings are correct, without having to go back and check them on the machine. Or, if you *do* need to undo someone else's changes, this list guides you in returning the machine to your preferred settings.

Note: Please refer to the index at the end of these instructions to locate any settings you don't recognize or understand.

To print the settings list:

1. If the machine is in Fax mode, proceed to step 2.
   If it is in Copy mode, press **FAX** to change to Fax mode.
2. Press **MENU**, **J**, **[List]**.

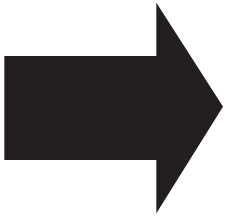
Printing a program list

Your machine can also print a *program list*. This lists the functions available on your fax machine and the keystrokes needed to complete them.

Note: Please refer to the index at the end of these instructions to locate any settings you don't recognize or understand.

To print a program list, press **MENU**, *****, **8**.

Trouble Shooting



Troubleshooting 4.1

Common questions 4.6

Troubleshooting

Occasionally, your machine encounters some trouble transmitting or receiving documents. When it does, it alerts you with an alarm. You can identify the problem with LCD messages and printed *check messages* and *error reports*, explained in the following pages.

Alarm

Your fax machine sounds an alarm tone — a series of short beeps — if either of these two problems occur:

- Trouble transmitting or receiving
- The machine is out of paper

LCD error messages

If a message not listed here is displayed, take corrective action by following the instructions in the message.

What you see on the LCD	What it means/*What to do*
# of stored page: XXX Keep these pages?	During scanning of the document, the memory overflowed. *Press **[YES]** to tell your fax to keep as many pages in memory as possible, or press **[NO]** to delete from memory all pages stored during this operation (but not previous operations).*
1 location or less	You tried to enter too many forwarding numbers for fax forwarding through the numeric keypad. You can enter up to 201 forwarding numbers by using one-touch key, speed dial number, group number and numeric keypad, but you can enter only 1 location by using numeric keypad (see pages 2.23–2.24).
30 locations or less	You tried to enter too many numbers for broadcast through the numeric keypad. You can enter up to 230 numbers for broadcast using one-touch keys, speed dial numbers or group numbers, however you can enter only 30 locations by using numeric keypad. *Press **[Cancel]** to delete the extra numbers and then try again.*
Already stored	You tried to enter a same fax (or phone) number, department code or sub-address which is already entered in your machine. *Enter a different fax (or phone) number, department code or sub-address.*
Box in use	You tried to erase a F-Code box which contains at least one document. *Erase the document(s), then try again.*
Call for service	The scanner lamp is dim or inoperable. Make repeated copies to help evaporate any internal moisture. *If that doesn't resolve the problem, call your authorized Muratec dealer or Muratec Customer Support.*
Carriage error	The mirror carriage of your machine has become inoperable. *Call your authorized Muratec dealer or Muratec Customer Support.*
Check # of documents	You placed fewer pages into your fax machine than you indicated in your page-numbering setting (see page 2.21). *Carefully recount the pages in your document, then retry the transmission, being sure to enter the correct number of pages if you use the page-numbering function.*

What you see on the LCD	What it means/*What to do*
Commands full	Your fax machine has all of its 100 possible delayed commands (automatic redialling counts as one) stored in memory and cannot accept another. *Delete an existing command by using* ***REVIEW COMMANDS***, ***or*** *wait until your fax has completed one of the delayed commands.*
Communication Error	A communication error disrupted the transmission or reception. *If you were transmitting, press STOP to clear the error message and then retry the transmission. If you were receiving a fax, try to contact the other person and have them retry the transmission. (The problem may be entirely with their machine, phone line, etc.)*
Document full	You tried to enter an document into Batch box or an F-Code box, but the machine has reached its capacity. *Delete documents stored in boxes until the machine will let you proceed.*
Document is in the ADF	The command you're trying to enter requires the use of the ADF, which is already in use. *Wait for the machine to stop using the ADF, then try again.*
Document stored	You tried to erase a batch box which contains at least one document. *Erase the document(s), then try again.* ***. . . or . . .*** You tried to store the polling document in your fax machine, where one already had been stored. *Wait for the fax to complete the regular polling operation, then try again.* ***. . . or . . .*** A received document was in your fax's memory when you tried to turn off the security reception passcode. *Print the received document from your fax's memory, then retry the desired operation.*
Enter number (0-32)	You tried to enter a call group number greater than 32. Your machine can maintain 32 call groups, numbered 1-32 (call group 0 covers all the groups). *Determine the correct call group identifier number and enter it, instead.*

What you see on the LCD	What it means/*What to do*
Hang Up Phone	The optional handset is off-hook. *Hang it up, making sure the upper part of the handset presses down on the "hook" button.*
Invalid I.D. code	The F-Code box I.D. code you entered isn't valid. *Try re-entering your F-Code box I.D. code.*
Invalid Number	You entered the incorrect number which has no function during the current operation.
Invalid protect passcode	The protection passcode you entered isn't valid. *Repeat the operation, entering the correct protection passcode.*
No command stored	You pressed **REVIEW COMMANDS** to review upcoming commands, but your fax machine had none stored.
No Document Stored	You tried to print a document from memory, but your fax machine had none stored.
No protect passcode	You tried to protect an operation or department code but there's no protection passcode stored in your fax machine. *Store a protection passcode in your machine, then retry protecting the operation or department code.*
No report	You requested an activity journal or confirmation report, but your fax machine has no record of any fax jobs having occurred.
Not stored	You selected an autodialer, batch box or F-Code box number for which there is no phone number programmed. *Either choose another number or dial a phone number directly from the numeric keypad.* ***. . . or . . .*** You tried to turn on the department code setting but there are no department codes stored in your fax machine. *Store at least one department code, then try again.*
Not store in Relay box	You tried to store a document for polling in an F-Code box which is set to be a relay box. *Select an F-Code box which is set to be a bulletin box, then try again.*

What you see on the LCD	What it means/*What to do*
Not store in Secure box	You tried to store a document for polling in an F-Code box which is set to be a security box. *Select an F-Code box which is set to be a bulletin box, then try again.*
PIN is not stored	You selected "Mode1" in the PIN mask feature and tried to call an autodialer number in which no PIN has been entered, or to call using numeric keypad without PIN. *Enter a PIN, then try again.*
Please call service	The printer unit of your fax machine has become inoperable. *Call your authorized Muratec dealer or Muratec Customer Support.*
Please supply paper	The paper cassette is out of paper. *Add paper to the cassette.*
Please wait	Your fax machine's printer is either warming up or busy. *Please wait until the fax is finished printing and then re-try your command or operation.*
Printing	The command you're trying to enter requires the use of the printer, which is already in use. *Wait for the fax to finish printing, then try again.*
Scanner in use	The command you're trying to enter requires the use of the scanner, which is already in use. *Wait for the fax to complete the scan, then retry the desired command.*
Too many characters	You attempted to enter too many numbers or other characters in the current operation. *Press **[Cancel]** to delete the extra characters, then try again. You may wish to review the operation's appropriate instructions.*
Too many locations	You tried to enter department code more than 100. Your machine can store up to 100 department codes.
Too many steps **Sure to register?**	You tried to enter too many steps for a macro. You can enter up to 60 steps into a macro key. *Press **[YES]** to tell your fax to register these steps, or press **[NO]** to cancel the registering.*

What you see on the LCD	What it means/*What to do*
Unable to reduce	In enlargement transmission, you cannot select the reduction ratio.

Errors

When sending faxes, your machine occasionally runs into *communication errors*. These can be caused by anything from lightning to telephone line interference. (These same factors cause static, or *line noise*, you sometimes hear on phone calls.) They also can be caused by problems with the fax machine at the other end of the line.

Often, simply trying your call again is all that's necessary. However, *if the problem persists regularly*, call your local telephone company for help. If that doesn't help *and the problem persists regularly*, call your authorized Muratec dealer.

Error reports

When an error occurs, your fax machine prints an *error report*. Each fax error report lists an *error message* which includes:

- A possible *solution* to the problem
- The *sending location* (if the remote fax stores a Location ID of its own)
- The *result* — which is a special *error code*.
- A *sample* of the document's first page.

Kinds of error codes

The error code listed in the "Result" column of the error report indicates the specific problem encountered:

- **"D"** codes — Occur while *dialling*
- **"R"** codes — Occur during *reception*
- **"T"** codes — Occur during *transmission*

Specific errors

Following are some error codes you may see on an error report:

Dialling errors

D.0.3, D.0.8 The remote unit didn't respond, the call couldn't be completed or **STOP** was pressed during dialling. *Retry the call. If your machine repeats the message, call the remote fax unit's operator and verify that unit is operating properly.*

D.0.2 The remote unit is busy. *Try the call again.*

D.0.6, D.0.7 Either the remote unit didn't respond, the call somehow didn't go through or **STOP** was pressed during dialling. *Try the call again.*

Reception errors

R.1.1 The calling fax machine didn't respond to your fax machine. This can happen if someone dials a wrong number or if the remote machine restricts access through use of a passcode.

R.1.2 The two fax machines were incompatible. Your fax machine sends and receives only ITU-T Group 3 (see Glossary, page AI.1) fax communication, the industry standard since the early 1980s.

R.1.4 Someone pressed **STOP** at the receiving fax machine.

R.1.5 The fax machine didn't detect the silence at the end of the call for receiving an RCR.

R.2.3 Poor phone line conditions made fax communication impossible. *Call someone at the remote machine's location.*

R.3.1 The sending fax machine detected too many errors from the receiving fax machine.

R.3.3 The sending fax machine is incompatible or had a document feeder problem during transmission.

R.3.4 Poor phone line conditions may have prevented your fax machine from properly printing some or all of the pages it received.

R.4.2 Either the line disconnected before transmission or the transmitting fax machine needs maintenance.

R.4.4 The fax machine has reached its memory capacity.

R.5.1, R.5.2 ECM reception failed (perhaps due to line noise).

R.8.1 A compatibility error occurred.

R.8.10 Line noise or other problems prevented line probing.

R.8.11 The fax machine timed out while waiting for the retrain signal.

Transmission errors

T.1.1 The remote fax machine didn't respond to your machine. *Call someone at the remote machine's location.*

T.1.2 Your fax machine's page counter detected a possible document feeder error. *Carefully put the document back into the feeder and try the call again.*

T.2.1 Either the phone line disconnected during transmission or fax communication became impossible due to bad phone line conditions. *Try the call again.*

T.2.2 The two fax machines were incompatible. Your fax machine sends and receives only ITU-T Group 3 (see "Glossary," page AI.1) fax communication, the industry standard since the early 1980s.

T.2.3 Bad phone line conditions made fax communication impossible. *Conditions can change rapidly, so try the call again later.*

T.3.1 The page counter in your fax machine detected a document feeder error during transmission. *Carefully re-insert the document into the feeder and re-try the call.*

T.3.2 The fax machine didn't detect the silence indicating the call had ended.

T.4.1 The telephone line disconnected during transmission because of excessive modem errors or because remote unit ran out of paper. *Try the call again.*

T.4.2 After transmission began, poor line conditions developed. *Try the call again.*

T.4.4 Poor line conditions prevented transmission. *Try the call again.*

T.5.1, T.5.2, T.5.3 ECM transmission failed (perhaps due to line noise). *Conditions can change rapidly, so try the call again later.*

T.8.1 A compatibility error occurred.

T.8.10 Line noise or other problems prevented line probing.

T.8.11 The remote fax machine didn't complete the equalizer training phase.

"Check Message" printouts

When there's a problem with a fax call and your machine detects an error, it produces an error printout headed by the words "Check Message." This printout lists the following information about the transmission:

- The resulting error code
- A communications error message (see "What error messages can mean," below)
- The phone number (or TTI, if programmed) of the fax machine with which your machine had attempted to communicate.

What error messages can mean

The error messages on Check Message printouts can mean a variety of things. Here's a brief summary:

Error message	Possible meanings
Check condition of remote fax.	• Remote machine malfunctioned • No "handshake" signals from remote fax • Wrong phone number reached
Repeat transmission.	• Poor phone line conditions • No "handshake" signals from remote fax • Document misfeed or miscount • Unable to reach remote machine after attempting specified number of redial tries
Line is busy.	• Remote machine's line was busy • Remote machine's line didn't answer
Check received documents.	• Remote confirmation signal not received from remote fax • Poor line conditions caused a poor image
Memory full.	• Remote fax's memory is full
Dialling number is not set.	• Stored phone number failed to dial properly
Stopped.	• Someone pressed **STOP** at the remote fax in the middle of the "handshake"

Common questions

General questions

Q: Where do I add ink or toner to make my fax machine's printouts darker?

A: *You can't adjust the darkness of an incoming fax printout*, but you *can* adjust the darkness of a copy or of a transmission. Insert a document and press **CONTRAST** to adjust the contrast setting. "Dark" prints at the darkest setting. The machine will reset automatically to normal contrast after you finish copying or sending the fax.

Q: When I unplug my machine or if the power goes off, will I lose the information I've stored — such as my TTI, autodialer entries, the time and date, etc. — and have to re-enter them?

A: No. There's a special battery built into your fax machine which protects user settings for several days if power fails or if you decide to move your machine. However, we do advise you to restore power to the machine as soon as possible.

Q: Can I use a dust cover on my fax machine?

A: No! A dust cover blocks air circulation, which could cause your machine to overheat.

Sending faxes

Q: Sometimes, I try to send a fax while using either the optional handset or the **MONITOR/CALL** feature. But, when the other side answers, I hear a horrible screeching sound, so I hang up. What's happening?

A: That was the other fax machine trying to say "Hello" to your machine! You'll hear sounds like that any time you call a fax machine which is set to answer automatically (as when you set your machine to Auto Answer mode). It's by using these tones that fax machines are able to send faxes over ordinary phone lines. So, next time you hear the tones, press **START** (and, if you're using an optional handset, hang up) to send a fax.

Q: I just sent a fax. However, the number that appeared in my machine's display during the transmission wasn't the number I dialled. Why?

A: That number you saw is programmed into the remote fax machine by the user. Some users prefer different numbers to appear than the ones they're really using. And some people don't know how to change the number once it's set.

Q: Can I transmit and receive at the same time?

A: No. Use the call request feature (see page 2.25) to ask the person at the remote fax machine if he or she wants to transmit or receive after your fax communication is complete.

Q: Do I have to dial a *1* for a long-distance call?

A: Yes. Dialling a fax number is just like dialling any other phone number, so be sure to include any special long-distance codes or dialling pauses when dialling. Also, remember to include them when you set your autodialer numbers.

Q: How do I send a fax to an overseas telephone number?

A: Dialling requirements for international calls may vary depending on your local telephone company's requirements. For most international calls, call *011,* then dial the appropriate country code, city code and phone number. (You may find country and city codes in the front section of your telephone directory.)

Q: Can I transmit if my fax machine runs out of paper?

A: Yes, but confirmation reports (see page 2.19) aren't available when you transmit without recording paper in your fax machine.

Q: Can I transmit a document that's extra long?

A: Yes, *if* the receiving fax machine is equipped to handle long documents. Many machines have a special setting which allows them to receive documents that exceed the normal length.

Q: Can I transmit a page from a newspaper?

A: No. A newspaper page can jam in your document feeder. First, use a copy machine to make an appropriately sized copy of the newspaper page, then transmit the copy.

Q: Can I transmit a page with correction fluid on it?

A: Yes, but only if the fluid is *completely dry* before you begin transmission.

Q: How can I be sure my fax was received?

A: Set your machine to print a confirmation report after each transmission (see pages 2.19).

Q: I don't want to install a dedicated phone line for my fax machine, so I've connected the machine to a PBX phone system. When I get a fax call, *all* the phones ring. How do I prevent this?

A: Call your PBX manufacturer or telephone company for assistance. They may be able to convert one of the PBX lines for use only by your fax machine.

Q: Sometimes when I dial a fax call by using either the optional handset or **MONITOR/CALL,** I don't hear the fax receiving tones from the other machine. Am I doing something wrong?

A: When this happens, try pressing **START** (and then hanging up the optional handset if you're using it), as usual. It's possible you're calling an older, non-standard fax machine that *doesn't* emit answering tones. Even a few Group 3 faxes (see "Glossary," page AI.1) on the market sound a *sending* tone but don't sound a *receiving* tone. After you transmit, call the person at the other fax machine's location to see if that person got your document.

Q: I inserted a document in the feeder and dialled a fax number, but my machine didn't transmit the document. Instead, "**** Auto Redial ****" now appears on my LCD. What does this mean?

A: The remote fax machine was busy, so your machine will try the call again, automatically. As long as it hasn't stored more than 99 delayed commands (counting automatic redials), your machine should still accept commands from you. If it has exceeded this quantity and will accept no more commands, try cancelling one of the delayed commands (see page 2.11). If the machine *still* won't cooperate, keep cancelling commands until it does.

Q: The specifications (page AI.2 in "General reference") list an average per-page transmission time, but when I transmit a page it can take much longer. Why?

A: We base this specification on transmission of an industry-standard test document called *ITU-T Test Document 1* (sometimes also called the "Slerexe letter"). Fax manufacturers use this method to test transmission speeds. However:

- The pages you send may be darker, or otherwise contain more information, than ITU-T Test Document 1.
- The transmission time measured for test documents doesn't include *handshake time* — the time during which two fax machines "introduce" themselves to each other and "agree on" the parameters of the call.
- The specification time is based on the use of normal resolution mode. You may be using fine, superfine or grayscale transmission, each of which takes longer than normal mode.

Q: What's a *default*?

A: A default is a setting that your machine will always refer to if nothing else is programmed. For example, you can set the default for this machine to send a fax by using its memory. If you set this action as the default, that's how your machine will always send a fax, until you tell it to do differently.

Reports

Q: I called the number *011-555-555-1212*, but not all of the digits appear on my transmit confirmation report (TCR). Why didn't the whole number appear? How can I be sure my document went to the right location?

A: The numbers you enter using the fax keypad are temporarily stored in a memory "buffer", and it's only the last part of the phone number that the buffer "remembers." An easy way to avoid getting incomplete telephone numbers on your printouts is to store your most frequently used numbers as one-touch keys or speed-dial numbers. These autodialer numbers will appear in their entirety on your TCR.

Receiving faxes

Q: My fax never answers. What's wrong?

A: Check to make sure your fax machine is properly connected to a working AC power outlet and phone jack. If you're using a second phone with your machine, make sure *it's* connected properly.

Q: Sometimes when I answer my machine with the optional handset, I hear a beeping sound that repeats every few seconds. Is this a fax?

A: Yes. When you hear these *fax tones*, someone is trying to send you a fax. Next time, press **START** and hang up the handset. Your fax will receive the message.

Q: Does my fax machine have to be plugged in to the AC power jack to receive a message?

A: Yes. Your phone will ring if the phone line is connected, but you can't receive a fax unless your fax machine is plugged into both the phone jack and the AC power jack. Make sure your fax machine is always plugged in so you never miss an important fax message.

Q: Can I receive a fax if I'm using the phone on my machine?

A: You can receive a fax from the person to whom you're talking. When that person has a document ready in his/her machine's feeder, press **START.**

Working with your answering machine

Q: People have complained that they call my fax machine and hear my answering machine's message, but are cut off before they can send a fax. What happened?

A: Any remote fax machine attempting to send a fax must "hear" responding fax tones within 40 seconds after the person at that machine presses the start key. That 40 seconds includes getting the dial tone, dialling the number, "listening" to the pause before the ringing starts and the remote fax machine answering the ring. Only after that time does your message play.
That's why we urge you to create a short outgoing message. The shorter the waiting period, the more likely it is that the remote fax machine will proceed with the transmission. Please create an outgoing message on your answering machine that's no longer than 10 seconds (see page 1.13 for a suggestion).

Polling

Q: What's the purpose of polling?

A: Polling lets you automatically "pull" a document which is set in another fax machine. You can poll whenever you need to retrieve information and don't want the source to pay for the phone call. With polling, you pay for the call and get the information you need.

How your fax machine works

How a fax machine works is simple:

You put a page into your fax machine's feeder and call a fax number. Your machine makes a satisfactory connection with the other machine, and then …

- *Your machine takes the document.*
  An image scanner in your fax machine examines the information on the page.
- *Your machine wraps the document.*
  Your fax machine translates the scanned information into a numeric code and compresses the code for the fastest possible transmission speed.
- *Your machine sends the document.*
  Finally, your fax machine sends the compressed code.

On the other end of the line …

- The remote fax machine *receives* the code.
- Your machine *unwraps* the document.
  The remote fax machine uncompresses and deciphers the code, turning it into a representation of the scan your machine made.
- The remote fax machine prints the representation.

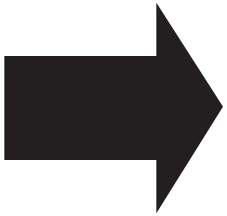
The only difference between a regular telephone call and a fax call is the *content* of the transmission:

- On a regular call, your telephone sends your voice.
- On a fax call, your fax machine sends a coded image.

The way fax machines work is regulated closely by the International Telecommunications Union (ITU), an agency of the United Nations. The standards the ITU applies ensure the compatibility of your fax machine with millions of other machines worldwide. However, they also limit the way you can use your machine with other devices, such as telephones and answering machines.

This page intentionally blank.

Appendix and index



Glossary AI.1

Index AI.5

Glossary

This glossary contains terms you may encounter when discussing or reading about fax machines. Please use these definitions for reference only. A list of definitions can also be found on the Muratec website at *www.muratec.com*.

24-hour format — Also called *military format*. A format for keeping time that does not use a.m. or p.m. to distinguish between morning and afternoon. In the 24-hour format, one o'clock in the morning marks 1:00, noon marks 12:00 and midnight marks 24:00. To calculate the 24-hour format, add 12 hours to all times after noon.

For example, *1:30 p.m.* would be *13:30* in the 24-hour format; *10:45 p.m.* would be *22:45* in the 24-hour format. And *11:15 a.m.* would be *11:15* in the 24-hour format.

A3, A4, B4 — Standard stationery sizes defined by the International Standards Organization, an agency of the United Nations. See also *Paper sizes*.

ADF — Automatic document feeder. See *document feeder*.

Alternate number — The number your machine dials after all attempts to the regular number fails. The user programs this alternate number, if so desired.

Answering machine — See *TAD*.

Autodialling — Enables user to store preprogrammed telephone numbers in the unit's memory. Storage capability varies from unit to unit.

Automatic fallback — The ability of a fax machine to slow down ("fall back"), when communicating with another fax which is communicating at a slower rate.

Automatic reduction — Many Muratec fax machines will automatically reduce the size of documents being transmitted to accommodate the effective printing width of the receiving unit. For example, this allows a fax machine with a 10″ scanning width to send an image 10″ wide to a unit with an 8.5″ print width. The receiving fax machine will receive a reduced-size printout of the complete image.

Bit — The smallest unit of information in a computer. Some Muratec fax machines, which are actually computers "dedicated" to telecommunications, allow users to change bits of information to provide or cancel features through software settings.

Bits per second — See *bps*.

Black density — Also called *black coverage*. The amount of non-white area on a page. For example, most regular office correspondence has a black density well under 10%, due to the presence of margins, spaces between words, spaces between lines and paragraphs and even spaces within letters. However, drawings and photographs have a much higher black density, sometimes approaching 100%. The higher a page's black density, the more slowly a fax machine sends it.

Broadcast — A fax transmission in which a single document is sent to more than one location.

bps — Bits per second. Used to express the speed of transmission of data. Because fax transmission treats a document as a graphic image rather than as a series of alphabetic and numeric characters, bps does **not** correspond to the number of characters transmitted per second.

Byte — A group of digital elements, usually sent as eight bits to the byte.

Call reserve — Also called *call request*. An ITU-T standard fax feature which allows a user to request voice communication prior to, during or after transmission.

Call-waiting service — An optional telephone company service that alerts you to another incoming call when the phone is already in use. Call-waiting signals often cause interruption of fax transmission or reception.

Caller ID — Optional service provided by your local telephone company that allows you to see a display of the number (phone or fax) that is calling.

CCITT — See *ITU-T*.

CCD, CIS — Charged coupled device, contact image sensor. Two types of scanning mechanisms used in some Muratec fax machines. The CCD "reads" fluorescent light bouncing off a document. The CIS uses a flat bar of light-emitting diodes (LEDs).

Command queue — The "list" your machine keeps of all its pending commands.

Command number — The number your machine gives to each "job" it is programmed to complete. You must know the command number in order to cancel or change any of the machine's jobs that it stores.

Compatibility — The term "compatible" describes the ability of separate things to function together. Your Muratec fax machine features ITU-T Group 3 compatibility, the modern standard for worldwide communication.

Confidential transmission — See *SecureMail*.

Confirmation report — See *RCR* and *TCR*.

Continuous polling — See *Polling*.

Copy mode — Allows your fax machine to be used as a convenience copier.

Cover page (automatic) — A small, user-created message; can be the first page of every transmission.

Database polling — See *Polling*.

Data compression — Used in digital fax machines to speed transmission. See also *Digital fax*, *MH* and *MSE*, *SMSE*.

Default — The setting your machine will always refer to if no other action has been programmed. For example, you can set the default for this machine to send a fax by using its memory. If you set this action as the default, that's how your machine will always send a fax, until you tell it differently.

Delayed command — Transmission or polling operation set by the user to occur later, automatically, at a predetermined time. Great for reducing costs by making fax calls during times when telephone costs are lowest, such as late at night or on weekends.

Digital — Using the binary system (which uses a combination of *0*s or *1*s) to describe everything, so that *0* means *off* and *1* means *on;* digital fax machines convert the graphic image of your document into a series of zeros and ones by using the binary system of transmission to encode black and white occurrences. This increases transmission speed by passing over white spaces. See also *White-line skip*.

Digital fax — Unlike analog systems that scan every portion of a document, digital fax machines survey a document's overall picture content. Digital fax machines scan a line and convert the information into a binary code of zeros and ones. The fax machine takes this information and compresses it, providing high transmission speeds. Many Muratec units offer proprietary methods for faster transmissions between Muratec-manufactured units (see also *MSE*, *SMSE)*.

DIP switches — Dual in-line package switch; a two-position on/off switch. Many Muratec fax machines include DIP switches to control optional settings or features.

Document feeder — The adjustable slot into which users place documents for faxing or copying.

Effective printing width — The widest image that can be printed on a fax.

Effective scan width — The maximum width the scanner in a fax can scan during transmission.

F-Code — A fax-industry standard created by the ITU-T for sub-addressing/password-based communications. Because F-Code is an industry standard, Muratec fax machines as well as all ITU-T equipped fax machines from other manufacturers can communicate with each other using sub-addressing.

Facsimile (or **fax**) — A form of communication involving the scanning and decoding of a document into electrical signals and transmitting of the document, over telephone lines to another device. This device then reconstructs the signals to produce an exact duplicate of the document. Also, a machine that performs such communication.

Fallback — Group 3 fax machines operate at the highest transmission speed possible on a given telephone line. Muratec systems offer automatic fallback; if line quality drops during transmission, the fax machine will reduce speed to the fastest possible level.

File number — A number the machine gives to each document it stores for a batch, F-Code or polling operation.

Fine resolution — 203H × 196V lpi. Also shown as *G3F* ("Group 3 fine") on some fax units.

Grayscale — Not a level of resolution, but a method of scanning and transmitting halftone images. Fax machines with grayscale abilities interpret photographs in levels of gray between white and black. The transmitting fax machine must have grayscale ability to send a photographic image accurately, but the receiving machine does not need it to print the image.

Group 3 — Refers to fax machines that use digital encoding. These units transmit one page in less than one minute and produce resolution of 203 × 98, 203 × 196, or 406 × 392 lpi.

Halftone — See *Grayscale*.

Handshaking — An exchange of data between telecommunications and/or computer equipment that "introduces" two systems to each other. For example, faxes use a handshaking protocol to identify the ITU-T group of each unit and to begin fax communication.

Hub — See *Relay broadcasting*.

Hz (or **Hertz**) — A measure of frequency equal to one cycle per second. Used in the specifications for a fax machine, it identifies the AC power the unit requires.

ITU-T — International Telecommunications Union – Telecommunications Sector. (Formerly known as *CCITT*, for *Consultative Committee for International Telegraph and Telephone.)* A telecommunications forum for member countries of the United Nations whose Study Group XIV established the primary groups for fax equipment, covering communication protocol and transmission. Muratec Group 3 fax machines offer the fastest transmissions allowed by the ITU-T when communicating with other Group 3 units.

ITU-T Test Document 1 — Also called the *Slerexe ("slehr-rehks") letter;* An ITU-T standard document with a known black density which fax makers often use to test transmission speeds of their fax machines. Published transmission speeds are also based on this document.

ITU-T V.29 and V.27 ter. — A standard set of communication procedures allowing fax machines to talk to all other units adhering to those standards.

JBIG — Joint Bi-level Image experts Group, the new ITU-T standard image data compression method. As JBIG compresses the data more efficiently than MMR, it is especially effective when transmitting halftone (grayscale) image document.
(Of course, the compression ratio may vary with the image data.)

Laser printing — A plain-paper printing system. Toner is attached to a charged drum and an image is transferred onto plain paper through electrical currents, then fused with heat and pressure to produce a dry, permanent printout.

LCD — Liquid crystal display. Used on some Muratec units for status displays.

Leased line — See *Private line*.

Load number — A number assigned to telecommunications equipment used in Canada; designed to help prevent overloading on a telephone circuit. See also *Ringer equivalence number*.

Location ID — See *Station ID*.

lpi — Lines per inch. The way fax image resolution is measured. (For example, see *Normal resolution*.)

Memory — Internal document storage. In Muratec fax machines, random access memory in the form of computer chips is used to store and hold documents for transmission and to hold some documents that have been received.

Memory overflow — A message that appears on the machine's LCD when the current operation requires more of the machine's electronic memory than what is available.

MH — Modified Huffman, the standard ITU-T Group 3 data compression method. A one-dimensional coding scheme that compresses data in a horizontal direction only. A feature of all Muratec fax machines, MH assures transmissions faster than one page per minute when communicating with other Group 3 units, regardless of manufacturer. See also *MR*, *MMR*, *MSE*, *SMSE*.

Military format — See *24-hour format*.

Modem — Modulator-demodulator. A device that converts digital data, like information from a fax machine, into an analog signal for transmission over ordinary telephone lines. A modem is included in a fax machine and allows it to be connected directly to a PSTN telephone line.

MR — Modified Read, an ITU-T Group 3 standard data compression method. A two-dimensional coding scheme that compresses data in both horizontal and vertical directions and allows for faster transmission when communicating with other Group 3 units, regardless of manufacturer. See also *MH*, *MMR*, *MSE*, *SMSE*.

MMR — Modified Modified Read, an ITU-T Group 3 standard data compression method. A two-dimensional coding scheme that compresses data in both horizontal and vertical directions and allows for faster transmission when communicating with other Group 3 units, regardless of manufacturer. See also *MH*, *MR*, *MSE*, *SMSE*.

Monitor — A speaker in most Muratec fax machines which allows the user to hear the dialling process. This is not a speakerphone, because it has no microphone for speaking to the person being called. For regular two-way voice communication, users must use the optional handset. See also *On-hook dialling*.

MSE, SMSE — Muratec's proprietary data compression methods, allowing a Muratec-manufactured fax machine to transmit more quickly when communicating with another Muratec-manufactured unit. MSE and SMSE are features on many Muratec fax machines. See also *MH*, *MR*, *MMR*.

Normal resolution — Shown as "norm"; 203H × 98V lpi. The default resolution mode for all Muratec fax machines.

One-touch dialling — Allows the fax user to store frequently used fax numbers for dialling with the touch of one key. See also *Autodialling* and *Speed-dialling*.

On-hook dialling — Dialling numbers by using the keypad on the fax unit without lifting a handset. On most Muratec fax models, the user can do this either silently or by using the monitor. See also *Monitor*.

Original document size — The largest (or smallest) document that can be fed safely through a fax machine.

Override — To change existing settings.

Paper sizes — All are width × length:

Letter-sized = 8.5″ × 11.0″ (216 × 279 mm)	Legal-sized = 8.5″ × 14.0″ (216 × 356 mm)
A5 = 5.8″ × 8.3″ (148 × 210 mm)	B5 = 7.2″ × 10.1″ (182 × 257 mm)
A4 = 8.3″ × 11.7″ (210 × 297 mm)	B4 = 10.1″ × 14.3″ (257 × 364 mm)
A3 = 11.7″ × 16.5″ (297 × 420 mm)	

Passcode — A four-digit code-number. On your fax machine, the protection passcode lets the user limit access to fax operations, as well as certain settings and even documents readied for polling (in the case of polling, only calling machines whose users enter the proper passcode will be able to poll the document.)

PBX (or **PABX**) — Private branch exchange; privately-owned telephone equipment serving a particular building, business or area. Many PBX systems use digital transmission lines which, unlike more common PSTN lines, are not compatible with fax machine use. The user should not connect a fax unit to a PBX without first checking with the system manufacturer or service representative.

PCL — Page Control Language. An industry standard for printer control. Some Muratec fax machines include or offer PCL-compatible printing for Windows-based personal computers.

Platen — A traditional copier-style top to a fax machine or digital copier. Some Muratec fax machines and multifunctional products include a platen top, allowing you to fax from books and other awkward sources.

Polling — Automatic transmission to a calling remote fax, or reception of a document from a remote fax set for this operation. Polling is convenient whenever a central unit must receive information from one or several remote faxes. The caller bears all telephone charges and prevents several remote units from calling at the same time. See also *Secure polling*.

Private line — (Or *leased line*.) A service offered by many telephone systems; provides an exclusive phone circuit between two geographic points. *A Muratec fax does not require a private line.* See also *PSTN*.

Proprietary — Non-standard. In fax, refers to a feature which works only in communications between fax machines that are the same brand.

PSTN — Public switched telephone network; the most common type of telephone lines and service in use, in contrast to private or leased lines. A Muratec fax provides fast, reliable data transmission over a PSTN line, and does not need a special or dedicated telephone line. See also *Private line*.

QuadAccess® — Muratec's QuadAccess allows your Muratec fax machine to perform four or more tasks simultaneously without slowing.

RCR — Receive confirmation report. An RCR is your assurance that the document you transmitted was received. The RCR prints after your transmission, identifying the receiving unit and recording the date, time, transmission mode, number of pages sent and the result. The RCR is an exclusive feature of Muratec fax machines and is available only when transmitting to other, compatible Muratec fax machines. See also *TCR*.

Receiver ID — See *Station ID*.

Redialling — The dialling again, either manually or automatically controlled, of the most recently dialled fax or phone number. Automatic redialling follows an unsuccessful dialling attempt.

Relay broadcasting — Lets some Muratec fax machines store a document in internal memory, transmits the document to the memory of a remote "hub" fax and then instruct that unit to relay (re-transmit) the document to each fax in a call group in the "hub" unit. This feature speeds extremely high-volume fax communication and allows a single command to initiate document transmission to hundreds of preprogrammed fax locations. It also saves phone charges for the originating machine. Your machine can initiate a relay broadcast.

Remote fax machine — The machine on the other "end" of a fax communication.

REN — See *Ringer equivalence number*.

Resolution — The resolution of documents transmitted or copied by fax machines is measured by the number of horizontal (H) and vertical (V) lines per inch (lpi) the unit can print. A Muratec unit may offer one or more of these resolution levels:

Normal	203H × 98V lpi
Fine	203H × 196V lpi
Superfine	203H × 392V lpi

Some Muratec units also offer grayscale transmission (see also *Grayscale*) for accurate reproduction of photographs and other shaded originals.

Ringer equivalence number — Also called *REN*. A number assigned to telecommunications equipment used in the United States; designed to prevent overloading on a telephone circuit. See also *Load number*.

Scanning width — See *Effective scanning width*.

SecureMail — Allows a Muratec fax user to send a document to or receive one into (usually something confidential) an "electronic mail box." The transmission is protected at the receiving Muratec fax by an access code; the receiving fax prints the document only when an authorized user enters the code.

Secure polling — Polling in which preset passcodes are checked between two machines before polling is allowed to take place.

Speed-dialling — Allows the fax user to store frequently used fax numbers for dialling with the touch of three keys — an identifier key (either ***** or **#**) and then a three-digit code — for each number. See also *Autodialling* and *One-touch dialling*.

Station ID — (Also called *Location ID* or *Receiver ID*.) An autodialer feature which lets the fax user enter a descriptive name to correspond with the number in an autodialer entry. For example, rather than entering only *1-972-555-3465*, the user can enter that number and a name, such as *Dallas Branch Office*. (Many Muratec models with this feature allow entry of both upper-case and lower-case letters, for greater ease of reading.)

Subaddressing — An ITU-T standard allowing fax machines to specify special delivery characteristics of a transmission. For example, subaddressing allows fax machines from different manufacturers to send and receive messages into confidential memory mailboxes, or to retrieve specific files from polling memory.

Subscriber ID — A fax machine's telephone number, as identified by a user setting. See *TTI*.

Super Group 3 — An extension of Group 3 fax technology standards, allowing the use of high-speed v.34 bis modems for 33.6 Kbps transmission and high-speed protocols for rapid handshaking.

Superfine resolution — 203H × 392V lpi. Your Muratec fax machine's superfine transmission mode is Group-3-compatible, not the more limited proprietary version.

TAD — Telephone answering device, or answering machine. Records incoming voice messages for playback. You can connect a TAD to a Muratec fax machine and use the two on one phone line.

TCR — Transmit confirmation report; this provides proof that your Muratec fax did send the document you set for transmission. Printed after transmission, the TCR also identifies the telephone number to which the fax sent the document, plus the actual time of transmission and how many pages the unit transmitted. See also *RCR*.

Thermal (paper) printing — A thermal head heats chemically treated, thermally sensitive paper in patterns conforming to the image the machine has scanned, creating a printed image. Thermal paper's tendency to discolor and fade, in addition to its curliness and the usual difficulty in writing on it, have made this method considerably less popular than plain-paper fax printing — particularly as plain-paper fax machines have dropped sharply in price.

TriAccess — Muratec's TriAccess allows a Muratec fax machine to perform three or more tasks simultaneously without slowing.

TTI — Transmit terminal identifier. A user-programmable line of information sent automatically with every page a fax machine sends; it appears at the top of each page printed by the receiving unit.

Transmission speed — How fast a fax machine is sending a fax document. This speed depends upon the modem speed of each unit, the resolution setting, the content of the document, the encoding technique and the condition of the phone line (clean, noisy, etc.) Any change in any one of these five conditions will affect the speed, sometimes significantly.

v.29 and v.27 ter — A standard set of communication procedures allowing fax machines to talk to other units using those standards. Specifically, these standards cover fax transmission at 9600 bps or slower.

v.34 — An international standard for fax modems — and other modems — with transmission speeds of up to 28.8 Kbps. The V.34 protocol is sometimes referred to as "V.Fast", because it represented a significant increase in possible transmission speed compared to the transmission protocol it replaced.

v.34 bis — A faster version of the V.34 standard, and sometimes referred to as "V.34 Plus" or "V.34 +". The V.34 bis protocol allows transmission at up to 33.6 Kbps, and represents the current maximum standard transmission speed possible under ITU-T Group 3. (The term "bis" is French, and designates the "second" version of the protocol.)

White-line skip — A technique used to speed up fax transmission by bypassing redundant areas, such as white space.

Index

A

Activity journal 2.18
Audible alarm 2.25
Auto reset time 3.9
Autodialer 2.1-2.8
  One-touch numbers 2.2-2.9
  Speed-dial numbers 2.4-2.6
Automatic document feeder (ADF) 1.5, 1.8

B

Batch transmission 2.12
Block Junk Fax 2.48-2.49
Broadcasting 2.9

C

Call group 2.7
Call request 2.25
Cancelling a transmission 2.11
Cancelling commands 1.11, 2.11
Changing redial settings 3.6
Closed network 2.48
Common questions 4.6-4.9
Confirmation stamp 3.3
Contrast 1.6, 3.1
Control panel 1.1
Copy functions . . . . . See “Copy reference” book
Cover page 2.21

D

Delayed transmission 2.10
  Printing a delayed command list 2.11
  Printing a stored document 2.11
  Reviewing or cancelling delayed commands 2.11
Department codes 2.49-2.51
Dialling pause 1.6
Dialling pause Changing the dialling pause length 3.6
Document, guide lines 1.5

E

EasyDial 2.8
ECM 3.1, 3.5
Electronic phone book 2.8
Energy saving 1.2
Enlarge transmission 2.20
Error messages 4.1-4.3

F

Fax & Copy 2.20
Fax Forwarding 2.23
FBS glass 1.5, 1.9
F-Code communication 2.27-2.36
  An introduction 2.27
  Creating or modifying 2.27
  Erasing an empty F-Code box 2.34
  F-Code box type 2.27
    Bulletin box 2.27, 2.29-2.30, 2.33-2.34
    Relay box 2.27, 2.31-2.46
    Security box 2.27, 2.28-2.29, 2.32
  F-Code transmission and polling 2.35-2.37

G

Glossary AI.1
Grayscale 1.6

I

Image rotate transmission 3.3

J

Journal 2.18

L

Location ID 2.1

M

Macro Keys 1.1
Macros 2.16-2.18
Memory transmission 1.8, 3.2
Monitor speaker's volume 3.8

N

Number of rings 3.5
Numbering pages 2.21

O

One-touch numbers 2.2-2.9
Out of paper reception 1.13

P

Panel auto reset time 3.9
Panel display 1.3
Passcode 2.44
PIN mask 2.45-2.47
Polling 2.22
  Being polled 2.23
  Continuous polling 2.22-2.23
  Regular polling 2.22
Print settings 3.4
  Paper save function 3.4
  Reduction margin 3.4
Programmable one-touch keys 2.37-2.43
  Erasing a programmable one-touch key 2.42
  Fax dialling with programmable one-touch 2.43-2.44
  Printing a list of your programmable one-touch keys 2.42
  Programming a batch transmission 2.40
  Programming a broadcast / group 2.38-2.42
  Programming a delayed transmission 2.37-2.42
  Programming an F-Code transmission 2.40-2.42
  Programming F-Code polling 2.41-2.42
  Programming regular polling 2.39-2.42
Protection passcode 2.44

Q

Quick Memory transmission 3.2

R

RCR 2.19
Reception modes 1.12
  Ans/Fax Ready mode 1.13
  Fax Ready mode 1.12
  Fax/Tel Ready mode 1.13
  Tel Ready mode 1.12
  Tel/Fax Ready mode 1.13
Redialling 1.11
Reports 2.19
  Receive confirmation report (RCR) 2.19
  Transmit confirmation report (TCR) 2.19
Resolution 1.6, 3.1
  Mixing resolution and contrast 1.6

S

Scan settings 3.1
  Primary contrast 3.1
  Primary resolution 3.1
Scanning size 1.7
Security features 2.44-2.51
Security reception 2.44-2.51
Sending a faxes 1.8
  Using monitor/call or a handset 1.10
  Using the ADF 1.8
  Using the FBS glass 1.9
Setting security transmission 2.47
Silent mode 3.7
Soft keys 1.2, 2.15
Some guideline 1.5
Special Dialling Characters 2.1
Special features 2.15-2.26
Speed-dial numbers 2.4-2.6
Subscriber ID 2.47, 2.48

T

TCR 2.19
Transferring documents (Fax Forwarding) 2.23
Troubleshooting 4.1-4.5
  Alarm 4.1
  Errors 4.4-4.5
TTI select 1.7

This page intentionally blank.

This page intentionally blank.

Muratec (UK) Ltd
No.1 Stoke Road
Guildford, Surrey GU1 4HW
Tel (01483) 302100 Fax (01483) 301900
http://www.muratec.co.uk

Copyright© 2000 by Murata/Muratec; all rights reserved. Printed in Japan.

D84-90330-60